

I Product: CLOROX COMMERCIAL SOLUTIONS® FORMULA 409® CLEANER DEGREASER DISINFECTANT	
Description: CLEAR, COLORED LIQUID WITH A CITRUS/FLORAL ODOR	
Other Designations	Distributor
EPA Reg. No. 67619-10	Clorox Professional Products Company 1221 Broadway Oakland, CA 94612
Emergency Telephone Nos.	
For Medical Emergencies call: (800) 446-1014 For Transportation Emergencies Chemtrec (800) 424-9300	

II Health Hazard Data	III Hazardous Ingredients												
<p><u>CAUTION:</u> EYE IRRITANT. Avoid eye and prolonged skin contact. Do not ingest.</p> <p><u>FIRST AID:</u></p> <p><u>EYE CONTACT:</u> Immediately flush eyes with plenty of water. If irritation persists, see a doctor.</p> <p><u>SKIN CONTACT:</u> Wash with water. Seek medical attention if irritation develops or persists.</p> <p><u>INGESTION:</u> Drink a glassful of water. Call a physician. Do not induce vomiting. Do not give anything by mouth to an unconscious or convulsing person.</p> <p><u>INHALATION:</u> If breathing problems develop remove to fresh air. Seek medical attention if respiratory irritation develops or breathing becomes difficult.</p> <p><u>KEEP OUT OF REACH OF CHILDREN</u></p>	<table border="1"> <thead> <tr> <th>Ingredients</th> <th>Concentration</th> <th>Worker Exposure Limit</th> </tr> </thead> <tbody> <tr> <td>n-Alkyl (C12-16) Dimethylbenzyl Ammonium Chloride CAS #68424-85-1</td> <td>0.3-0.6%</td> <td>None Established</td> </tr> <tr> <td>n-Propoxypropanol CAS # 1569-01-3</td> <td>0.5 - 2%</td> <td>None Established</td> </tr> <tr> <td>Monoethanolamine CAS #141-43-5</td> <td>0.5 – 1.5%</td> <td>3 ppm - TLV-TWA^a 3 ppm - PEL^b 6 ppm - TLV-STEL^c</td> </tr> </tbody> </table> <p>^aTLV-TWA = ACGIH Threshold Limit Value - Time Weighted Average ^bPEL = OSHA Permissible Exposure Limit - Time Weighted Average ^cTLV-STEL = ACGIH Threshold Limit Value - Short Term Exposure Limit</p> <p>None of the materials in this product are on the IARC, OSHA, or NTP carcinogen lists.</p>	Ingredients	Concentration	Worker Exposure Limit	n-Alkyl (C12-16) Dimethylbenzyl Ammonium Chloride CAS #68424-85-1	0.3-0.6%	None Established	n-Propoxypropanol CAS # 1569-01-3	0.5 - 2%	None Established	Monoethanolamine CAS #141-43-5	0.5 – 1.5%	3 ppm - TLV-TWA ^a 3 ppm - PEL ^b 6 ppm - TLV-STEL ^c
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IV Special Protection and Precautions	V Transportation and Regulatory Data
<p><u>Hygienic Practices:</u> Wash hands after direct contact. Do not wear product-contaminated clothing for prolonged periods.</p> <p><u>Engineering Controls:</u> Use general ventilation to minimize exposure to product vapor or mist.</p> <p><u>Personal Protective Equipment:</u> Wear safety glasses. Wear gloves for repeated or prolonged skin contact.</p>	<p><u>DOT/IATA/IMDG:</u> Not restricted.</p> <p><u>EPA - SARA Title III/CERCLA:</u> This product is not reportable under Sections 311/312 or 313; and contains no chemicals which are regulated under Section 304/CERCLA.</p> <p><u>TSCA Status:</u> All components of this product are on the TSCA Inventory.</p>

VI Spill Procedures/Waste Disposal	VII Reactivity Data
<p><u>Spill Procedures:</u> Absorb and containerize. Wash residual down to sanitary sewer. Contact the sanitary treatment facility in advance to assure ability to process washed-down material.</p> <p><u>Waste Disposal:</u> Dispose of in accordance with all applicable federal, state, and local regulations.</p>	<p>Stable under normal use and storage conditions.</p>

VIII Fire and Explosion Data	IX Physical Data
<p><u>Flash Point:</u> >200 F</p> <p><u>Fire Extinguishing Agents:</u> Foam, Dry Chemical, Water, CO₂</p>	<p>pH..... 10.5 Solubility in Water..... complete Specific Gravity (H₂O=1) ~1.0</p>



Material Safety Data Sheet

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: DURACELL PROCELL PROFESSIONAL ALKALINE BATTERIES

Product Identification: Alkaline Manganese Dioxide Cells –

Duracell Designations: PC1300; PC1400; PC1500; PC1604; PC2400; PC9100; PC7K67; PC903
PC908

Product Use: Energy Source

MSDS Date of Preparation: July 1, 2008

Company Identification

US Office

Duracell, a division of P&G
Berkshire Industrial Park
14 Research Drive
Bethel, CT USA 06401
(203) 796-4000

Canadian Office

Duracell, a division of P&G
4711 Yonge Street
Toronto, Ontario
Canada M2N 6K8
(416) 730-4711

Emergency Phone Number: INFOTRAC Emergency Response Hotline 1-800-535-5053 (US & Canada)

SECTION 2: HAZARDS IDENTIFICATION

Physical Appearance: Cylindrical battery

EMERGENCY OVERVIEW

CAUTION: May explode or leak, and cause burn injury, if recharged, disposed of in fire, mixed with a different battery type, inserted backwards or disassembled. Replace all used batteries at the same time. Do not carry batteries loose in your pocket or purse. Do not remove the battery label.

Potential Health Effects:

The chemicals and metals in this product are contained in a sealed can. Exposure to the contents will not occur unless the battery leaks, is exposed to high temperatures or is mechanically, physically, or electrically abused. Damaged battery will release concentrated potassium hydroxide, which is caustic. Anticipated potential leakage of potassium hydroxide is 2 to 20 mL, depending on battery size. A similar amount of zinc may also leak.

Eye Contact: Contact with battery contents may cause severe irritation and burns. Eye damage is possible.

Skin Contact: Contact with battery contents may cause severe irritation and burns.

Inhalation: Inhalation of vapors or fumes released due to heat or a large number of leaking batteries may cause respiratory and eye irritation.

Ingestion: Swallowing is not anticipated due to battery size. Choking may occur if smaller AAA batteries are swallowed. Ingestion of battery contents (from a leaking battery) may cause mouth, throat and intestinal burns and damage.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Amount
Manganese Dioxide	1313-13-9	35-40%
Zinc	7440-66-6	10-25%
Potassium Hydroxide (35%)	1310-58-3	5-10%
Graphite (natural or synthetic)	7782-42-5, 7440-44-0	1-5%

SECTION 4: FIRST AID MEASURES

Eye Contact: If battery is leaking and material contacts the eye, flush thoroughly with copious amounts of running water for 30 minutes. Seek immediate medical attention.

Skin Contact: If battery is leaking and material contacts the skin, remove any contaminated clothing and flush exposed skin with copious amounts of running water for at least 15 minutes. If irritation, injury or pain persists, seek medical attention.

Inhaled: If battery is leaking, contents may be irritating to respiratory passages. Move to fresh air. If irritation persists, seek medical attention.

Swallowed: If battery contents are swallowed, do not induce vomiting. If the victim is alert, have them rinse their mouth and the surrounding skin with water for at least 15 minutes. Seek immediate medical attention.

Note: This MSDS does not include or address the small button cell batteries which can be ingested.

SECTION 5: FIRE FIGHTING MEASURES

Fire and Explosion Hazards: Batteries may burst and release hazardous decomposition products when exposed to a fire situation.

Extinguishing Media: Use any extinguishing media that is appropriate for the surrounding fire.

Special Fire Fighting Procedures: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. Fight fire from a distance or protected area. Cool fire exposed batteries to prevent rupture. Use caution when handling fire-exposed containers (containers may rocket or explode in heat of fire).

Hazardous Combustion Products: Thermal degradation may produce hazardous fumes of zinc and manganese; hydrogen gas, caustic vapors of potassium hydroxide and other toxic by-products.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Notify safety personnel of large spills. Caustic potassium hydroxide may be released from leaking or ruptured batteries. Clean-up personnel should wear appropriate protective clothing to avoid eye and skin

contact and inhalation of vapors or fumes. Increase ventilation. Carefully collect batteries and place in an appropriate container for disposal.

SECTION 7: HANDLING AND STORAGE

Avoid mechanical or electrical abuse. DO NOT short circuit or install incorrectly. Batteries may explode, pyrolyze or vent if disassembled, crushed, recharged or exposed to high temperatures. Install batteries in accordance with equipment instructions. Do not mix battery systems, such as alkaline and zinc carbon, in the same equipment. Replace all batteries in equipment at the same time. Do not carry batteries loose in a pocket or bag. Do not remove battery label.

Storage: Store batteries in a dry place at normal room temperature. Do not refrigerate – this will not make them last longer.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

The following occupational exposure limits are provided for informational purposes. No exposure to the battery components should occur during normal consumer use.

Chemical Name	Exposure Limits
Manganese Dioxide	5 mg/m ³ Ceiling OSHA PEL 0.2 mg/m ³ TWA ACGIH TLV
Zinc	None established for zinc metal
Potassium Hydroxide	2 mg/m ³ Ceiling ACGIH TLV
Graphite (natural-non-fibrous)	15 mppcf TWA OSHA PEL 2 mg/m ³ TWA (respirable dust) ACGIH TLV
Graphite (synthetic non-fibrous)	5 mg/m ³ TWA (respirable dust), 15 mg/m ³ TWA (total dust) OSHA PEL 2 mg/m ³ TWA (respirable dust) ACGIH TLV

Ventilation: No special ventilation is needed for normal use.

Respiratory Protection: None required for normal use.

Skin Protection: None required for normal use. Use neoprene, rubber or latex gloves when handling leaking batteries.

Eye Protection: None required for normal use. Wear safety goggles when handling leaking batteries.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Cylindrical battery.

Specific Gravity: Not applicable

Water Solubility: Insoluble

Vapor Pressure: Not applicable

Vapor Density: Not applicable

Boiling Point: Not applicable

Melting Point: Not applicable

Flash Point: Not applicable

Autoignition Point: Not applicable

SECTION 10: STABILITY AND REACTIVITY

Stability: This product is stable.

Incompatibility/Conditions to Avoid: Contents are incompatible with strong oxidizing agents. Do not heat, crush, disassemble, short circuit or recharge.

Hazardous Decomposition Products: Thermal decomposition may produce hazardous fumes of zinc and manganese; caustic vapors of potassium hydroxide and other toxic by-products.

Hazardous Polymerization: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity Data:

Manganese Dioxide: LD50 oral rat >3478 mg/kg

Potassium Hydroxide: LD50 oral rat 273 mg/kg

Chronic Effects: The chemicals in this product are contained in a sealed can and exposure does not occur during normal handling and use. No chronic effects would be expected from handling a leaking battery.

Target Organs: Skin, eyes and respiratory system.

Carcinogenicity: None of the components of this product are listed as carcinogens by ACGIH, IARC, NTP or OSHA.

SECTION 12: ECOLOGICAL INFORMATION

No ecotoxicity data is available. This product is not expected to present an environmental hazard.

SECTION 13: DISPOSAL INFORMATION

Disposal should be in accordance with Federal, state/provincial and local regulations. Products covered by this MSDS, in their original form, when disposed as waste, are considered non hazardous waste according to Federal RCRA regulations (40 CFR 261).

Alkaline batteries can be safely disposed of with normal household waste. Due to concerns about mercury in the municipal solid waste stream, Duracell has voluntarily eliminated all of the added mercury from its alkaline batteries since 1993. Individual consumers may dispose of spent (used) batteries with household trash. Duracell does not recommend that spent batteries be accumulated and disposed of in large quantities. Do not incinerate for disposal except for in a controlled incinerator.

Some communities offer recycling or collection of alkaline batteries – contact your local government for disposal practices in your area.

SECTION 14: TRANSPORT INFORMATION

Products covered by this MSDS, in their original form, are considered “dry cell” batteries and are not regulated as “DANGEROUS GOODS” for transportation.

For finished packaged product transported by ground (US DOT): – not regulated

For finished packaged product transported by sea (IMDG) – not regulated

For finished packaged product transported by air (IATA): – not regulated

SECTION 15: REGULATORY INFORMATION

United States

OSHA Status: While the finished product(s) is considered an article and not covered by the OSHA Hazard Communication Standard, 29 CFR 1910.1200, this MSDS contains valuable information critical to the safe handling and proper use of the product".

EPA TSCA Status: All intentionally-added components of this product are listed on the US TSCA Inventory.

SARA 313/302/304/311/312 chemicals: Manganese compounds 35-40%, Zinc 10-25%

California: This product has been evaluated and does not require warning labeling under California Proposition 65.

State Right-to-Know and CERCLA:

The following ingredients present in the finished product are listed on state right-to-know lists or state worker exposure lists

Ingredient	CAS #	Level	CERCLA RQ	State				
				IL	MA	NJ	PA	RI
Manganese Dioxide	1313-13-9	35-40%	None	Y	Y	N	Y	Y
Zinc	7440-66-6	10-25%	1000 lb	Y	Y	Y	Y	N
Potassium Hydroxide	1310-58-3	5-10%	1000 lb	Y	Y	Y	Y	Y
Graphite	7782-42-5 7440-44-0	1-5%	None	Y	Y	N	Y	Y

Canada All intentionally-added components of this product are listed on the Canadian DSL. This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and this MSDS contains all information required by the Controlled Products Regulations.

SECTION 16: OTHER INFORMATION

P&G Hazard Rating: Health: 0 Fire: 0 Reactivity: 0

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Data supplied is for use only in connection with occupational safety and health.

DISCLAIMER: This MSDS is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. The information contained here has been compiled from sources considered by Procter & Gamble to be dependable and is accurate to the best of the Company's knowledge. It is not meant to be an all-inclusive document on worldwide hazard communication regulations.

This information is offered in good faith. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage or release to the environment. Procter & Gamble assumed no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.



Revision Number: 002.1

Issue date: 05/27/2009

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Silver Grade Anti-Seize Lubricant
Product type: Lubricant
Company address:
 Henkel Corporation
 1001 Trout Brook Crossing
 Rocky Hill, Connecticut 06067

IDH number: 235086
Item number: 80206
Region: United States
Contact information:
 Telephone: 860.571.5100
 Emergency telephone: 860.571.5100
 Internet: www.henkeln.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state:	Paste	HEALTH:	1
Color:	Silver	FLAMMABILITY:	1
Odor:	Hydrocarbon-like	PHYSICAL HAZARD:	1
		Personal Protection:	See MSDS Section 8

WARNING: CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: Moderate respiratory tract irritation.
Skin contact: Moderate skin irritation.
Eye contact: Moderate eye irritation.
Ingestion: Principal hazard of ingestion is aspiration into the lungs and subsequent pneumonitis. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous components	CAS NUMBER	%
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	10 - 30
Graphite	7782-42-5	10 - 30
Calcium oxide	1305-78-8	10 - 30
Mineral oil light naphthenic hydrotreat. <3% DMSO	64742-53-6	10 - 30
Aluminum not powder, dust or fume	7429-90-5	5 - 10
Distillates (petroleum), straight-run middle	64741-44-2	1 - 5
Quartz (SiO ₂)	14808-60-7	0.1 - 1

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If symptoms persist, seek medical advice.
Skin contact: If symptoms develop and persist, get medical attention. Wash with soap and water.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Ingestion: Do not induce vomiting. Get immediate medical attention.

5. FIRE FIGHTING MEASURES

Flash point: > 93 °C (> 199.4 °F)

Autoignition temperature: Not determined

Flammable/Explosive limits - lower: Not available

Flammable/Explosive limits - upper: Not available

Extinguishing media: Dry chemical. Carbon dioxide. Foam.

Special firefighting procedures: None

Unusual fire or explosion hazards: None

Hazardous combustion products: Oxides of carbon. Oxides of nitrogen.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Prevent further leakage or spillage if safe to do so.

Clean-up methods: Store in a partly filled, closed container until disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Remove all sources of ignition.

7. HANDLING AND STORAGE

Handling: Keep away from heat, spark and flame. Avoid skin and eye contact.

Storage: Keep in a cool, well ventilated area.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Distillates (petroleum), hydrotreated heavy naphthenic	5 mg/m ³ TWA mist 10 mg/m ³ STEL mist	5 mg/m ³ TWA mist	None	None
Graphite	2 mg/m ³ TWA Respirable fraction.	5 mg/m ³ TWA Respirable fraction. 15 mg/m ³ TWA Total dust. 15 MPPCF TWA	None	None
Calcium oxide	2 mg/m ³ TWA	5 mg/m ³ TWA	None	None
Mineral oil light naphthenic hydrotreat. <3% DMSO	5 mg/m ³ TWA Mist. 10 mg/m ³ STEL Mist.	500 ppm (2,000 mg/m ³) TWA	None	None
Aluminum not powder, dust or fume	1 mg/m ³ TWA Respirable fraction.	15 mg/m ³ TWA (as Al) Total dust. 5 mg/m ³ TWA (as Al) Respirable dust.	None	None
Distillates (petroleum), straight-run middle	5 mg/m ³ TWA mist 10 mg/m ³ STEL mist	5 mg/m ³ TWA mist	None	None
Quartz (SiO ₂)	0.025 mg/m ³ TWA Respirable fraction.	2.4 MPPCF TWA Respirable. 0.1 mg/m ³ TWA Respirable. 0.3 mg/m ³ TWA Total dust.	None	None

Engineering controls:

Use local ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

Respiratory protection:

Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

Eye/face protection:

Safety goggles or safety glasses with side shields.

Skin protection:

Neoprene or oil resistant gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Paste
Color:	Silver
Odor:	Hydrocarbon-like
Odor threshold:	Not available
pH:	Not applicable
Vapor pressure:	< 5 mm hg
Boiling point/range:	Not available
Melting point/ range:	Not available
Specific gravity:	1.25
Vapor density:	Not available
Flash point:	> 93 °C (> 199.4 °F)
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Autoignition temperature:	Not determined
Evaporation rate:	Not available
Solubility in water:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
VOC content:	12.96 %; 162 g/l

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	None reasonably foreseeable.
Incompatible materials:	Strong oxidizing agents.
Conditions to avoid:	None known

11. TOXICOLOGICAL INFORMATION

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Distillates (petroleum), hydrotreated heavy naphthenic	No	No	No
Graphite	No	No	No
Calcium oxide	No	No	No
Mineral oil light naphthenic hydrotreat. <3% DMSO	No	No	No
Aluminum not powder, dust or fume	No	No	No
Distillates (petroleum), straight-run middle	No	No	No
Quartz (SiO ₂)	Known carcinogen.	Group 1	No

Hazardous components	Health Effects/Target Organs
Distillates (petroleum), hydrotreated heavy naphthenic	Irritant
Graphite	Lung
Calcium oxide	Irritant, Corrosive, Eyes
Mineral oil light naphthenic hydrotreat. <3% DMSO	Irritant
Aluminum not powder, dust or fume	Central nervous system, Irritant, Lung
Distillates (petroleum), straight-run middle	Irritant
Quartz (SiO ₂)	Immune system, Lung, Some evidence of carcinogenicity

12. ECOLOGICAL INFORMATION

Ecological information: Not available

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name:	Not regulated
Hazard class or division:	None
Identification number:	None
Packing group:	None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12(b) Export Notification:	None above reporting de minimus
CERCLA/SARA Section 302 EHS:	None above reporting de minimus
CERCLA/SARA Section 311/312:	Immediate Health
CERCLA/SARA 313:	This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Aluminum not powder, dust or fume (CAS# 7429-90-5).
California Proposition 65:	This product contains a chemical known in the State of California to cause cancer.

Canada Regulatory Information

CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class:	D.2.A, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: Not available

Prepared by: C.J. Michaels, Manager, Regulatory Affairs

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any of Henkel Corporation's products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE AND PREPARATION

Supplier/Manufacturer:

American Polywater Corporation

11222 - 60th Street North
P.O. Box 53
Stillwater, MN 55082 USA
Phone: 1-651-430-2270
Fax: 1-651-430-3634

Polywater Europe BV

Mauritsplaat 126
NL-3012CD Rotterdam
Netherlands
Tel: +31 10 233 0578

Emergency Number: +1-651-430-2270

**Product Name: CableFree®
Loosener**

Chemical Description: Polymer lubricant and solvent emulsion

Product Use: Cable loosener

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS #</u>	<u>EC #</u>	<u>Wt %</u>
Medium Aliphatic Petroleum Solvent	64742-47-8	265-149-8	<10%
Citrus Terpenes	94266-47-4	304-454-3	<10%

This product contains no other reportable hazardous components under 29 CFR 1910.1200. This product contains no other reportable hazardous components under European Directives 91/55/EEC.

3. HAZARDS IDENTIFICATION

Emergency Overview:

Slippery if spilled. Combustible. May cause skin irritation. Avoid contact with skin. In case of skin or eye contact, flush with water. Do not ingest. Keep out of reach of children.

Eye Contact:

Direct eye contact with material or vapors may cause eye irritation. Contact at elevated temperatures may cause thermal burns.

Skin Contact:

This product has low skin irritation potential. Prolonged or repeated skin exposure can remove oils, causing redness, drying and cracking. Persons with pre-existing skin disorders may be more susceptible to skin irritation from this material.

Irritation and Sensitization Potential:

This product has skin irritation potential.

Inhalation (Breathing):

Vapors may cause irritation of the nose and throat. Prolonged exposure to excessively high vapor concentrations can result in central nervous system depression (e.g., drowsiness, dizziness, loss of coordination, and fatigue). Persons with impaired lung function may experience additional breathing difficulties due to the irritant properties of this material.

Ingestion (Swallowing):

Material has low level of oral toxicity. Ingestion of large quantities may cause irritation of the digestive tract, nausea, vomiting, or diarrhea.

4. FIRST AID MEASURES

Eye Contact:	If eye irritation from exposure to vapors develops, move to fresh air. Flush eyes with clean water. If irritation persists, seek medical attention. For direct eye contact, flush with large quantity of water for 15 minutes. Seek medical attention.
Skin Contact:	Remove contaminated clothing; flush skin thoroughly with water. If irritation occurs, seek medical attention.
Inhalation (Breathing):	If irritation of nose or throat develops, move to fresh air. If irritation persists, seek medical attention. If breathing is difficult, provide oxygen. If not breathing, give artificial respiration. Seek immediate medical attention.
Ingestion (Swallowing):	Do not induce vomiting or give anything by mouth. If victim is drowsy or unconscious, place on the left side with head down. Do not leave victim unattended. Seek medical attention.

5. FIRE-FIGHTING MEASURES

Flash Point:	167°F / 75°C(PMCC)
Flammable Limits:	Not Available
Autoignition Temperature:	Not Available
Hazardous Decomposition and By-Products:	Carbon dioxide, carbon monoxide.
Extinguishing Media:	Carbon Dioxide, Dry Chemical or Foam.
Special Precautions:	Avoid direct streams of water, as fire scattering may occur.
Unusual Hazards:	Sealed container can build up pressure when exposed to high heat. Cool containers with water.

6. ACCIDENTAL RELEASE MEASURES

For small spills, absorb with sand or absorbents. For large spills, stay upwind and away from spill. Keep all sources of ignition away from spill. If spill is indoors, ventilate area of spill. Foam, especially high expansion foam, may be used to suppress vapors. Keep out of drains, sewers or waterways. Use sand or other inert material to dam and contain spill. Do not flush area with water.

7. HANDLING AND STORAGE

Keep containers tightly closed. Keep containers cool, dry, and away from sources of ignition. Use and store this product with adequate ventilation. Avoid inhalation of vapors and personal contact with the product. Use good personal hygiene practice. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection:	Normal ventilation is adequate. If exposure exceeds recommended limits, respirator protection is recommended. Use a respirator or gas mask with cartridges for organic vapors (NIOSH approved) or use supplied air equipment.
Protective Gloves:	The use of impermeable gloves is recommended to prevent skin contact.

Eye Protection: Eye protection is recommended, especially if the material is used in ways where it could contact the eyes.

Other Protective Equipment: It is suggested that a source of clean water be available in work area for flushing eyes and skin. Impervious clothing should be worn as needed.

Exposure Limits and Recommendations:

<u>Chemical Component</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Medium Aliphatic Petroleum Solvent*	Not Established	Not Established
Citrus Terpenes	Not Established	Not Established

* Use 100 ppm 8-hour TWA established for Stoddard Solvent – Petroleum Distillate

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Milky white, stringy liquid with light citrus odor.

Odor Threshold: Not Available

Vapor Density (Air = 1): Not Available

Specific Gravity (H₂O = 1): 0.98

Solubility in Water: >80%

Boiling Point: I.B.P. 212°F / 100°C

Freezing Point: Not Available

Evaporation Rate: <0.1 (n-butyl acetate = 1)

Vapor Pressure: Not Available

Viscosity: 1,500-5,000 cps.

pH: Not Available

Volatiles (Weight %): 93-94%

VOC Content: 152 g/l

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions to Avoid: Avoid heat, flame and contact with strong oxidizing agents.

Hazardous Decomposition and By-Products: Carbon dioxide, carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Toxicity to Animals: Medium Aliphatic Petroleum Solvent
 LD₅₀ (oral rat) >5000 mg/kg
 LD₅₀ (dermal rabbit) >2,000 mg/kg
 LC₅₀ (inhl rat) >4.3 mg/l

Chronic Exposure: Not Available

Carcinogenic Status:	This substance has not been identified as a carcinogen or probable carcinogen by NTP, IARC, or OSHA, nor have any of its components.
Reproductive Toxicity:	Not Available
Mutagenicity:	Not Available
Teratogenicity:	Not Available
Toxicologically Synergistic Products:	Not Available

12. ECOLOGICAL INFORMATION

Mobility:	No information available.
Bioaccumulation:	No information available.
Ecotoxicity:	No information available.

13. DISPOSAL CONSIDERATIONS

Dispose of product in accordance with local, county, state, and federal regulations. CableFree® Loosener is not considered hazardous waste under RCRA.

14. TRANSPORTATION INFORMATION

UN Number:	Not Listed
UN Proper Shipping Name:	Not Applicable
Class and Subsidiary Risk:	Not Applicable
Packing Group:	Not Applicable
TDG:	Not Regulated
ICAO/IATA-DGR:	Not Regulated
IMDG:	Not Regulated
ADR/RID:	Not Regulated

15. REGULATORY INFORMATION

USA Federal and State

All components are listed on the TSCA inventory.

Hazard Categories for SARA Section 311/312 Reporting	<u>Acute</u> No	<u>Chronic</u> No	<u>Fire</u> Yes	<u>Pressure</u> No	<u>Reactive</u> No
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<u>Components</u>	<u>CERCLA/SARA Sec 302 Hazardous Substance RQ</u>	<u>EHS TPQ</u>	<u>SARA Sec. 313 Toxic Release</u>
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The components of CableFree® Loosener are not affected by these Superfund regulations.

European Union

Product is classified as hazardous according to European Directives 88/379/EEC and 67/548/EEC and EU Regulation (EC) No 1272/2008.

Risk Phrases: Not Applicable

Safety Phrases: S2: Keep out of reach of children.
S62: If swallowed, do not induce vomiting.

Product complies with the communication requirements of REACH Regulation (EC) No. 1907/2006. It does not contain Substances of Very High Concern (SVHC).

Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Classification: B3

Canadian DSL: All ingredients listed.

Australia

All components are listed on the AICS.
Hazardous according to criteria of NOHSC Australia.

Contact Information: ADAPT Australia Pty. Ltd.
11 - 19 Global Drive
Tullamarine Victoria 3043
Telephone Number. 03 9330 0666

Emergency Telephone Number: 0421 277 889

16. OTHER INFORMATION

NFPA Ratings: Health: 0
Fire: 2
Reactivity: 0

Revision Date: May 13, 2010

Revision Number: 1

Reviewed By: S. H. Dahlke

The information and recommendations contained herein are believed to be reliable. However, the supplier makes no warranties, express or implied, concerning the use of this product. The buyer must determine conditions of safe usage and assumes all risk and liability in handling this product.

WHEATLAND TUBE COMPANY

Wheatland, PA 16161

(724) 342-6851

Fax: (724) 342-0294

Dear Customer:

Enclosed is a Wheatland Tube Company Material Safety Data Sheet for the pipe products that you purchase. It is the continuing policy of Wheatland Tube Company to provide to our customers, health, safety and environmental protection information that is appropriate for handling and utilizing our products.

These Material Safety Data Sheets contain information that is valuable to your employee health and safety program and may be required to be in your possession by the Federal OSHA Hazard Communication Standard or other right-to-know legislation. It is important that your facility hazard communication coordinator, industrial hygiene or safety personnel receives this information so that it can be communicated to those employees having contact with these products.

A revised Material Safety Data Sheet will be forwarded to you when significant changes of the information contained therein necessitate publication of an updated copy.

Addendum 2 lists the most commonly used rust preventative or protective coatings that are applied to products requiring such treatment, if a coating is not specified by you. This addendum lists the coatings which are applied and the manufacturer's identification and address. This information is provided to enable you to obtain a Material Safety Data Sheet directly from the manufacturer or supplier for the rust preventative or coating that is applied to the product that you purchase. Material Safety Data Sheets for specified coatings should also be requested from the manufacturer or supplier of the coating. This procedure will make it possible for the manufacturer or supplier to send copies of Material Safety Data Sheets directly to you, as a user of that product, when revised MSDS'S are produced.

Also contained in the package is a label that can be reproduced or the information contained therein extracted for label-producing purposes.

Hazard Communication Programs are of the utmost importance to Wheatland Tube Company. We believe this information will be very beneficial to your Hazard Communication Program and we welcome any inquiries regarding additional information that you may require.

JACK A. GRUBER, Ph.D.
DIRECTOR - TECHNICAL SERVICES

WHEATLAND TUBE COMPANY
MATERIAL SAFETY DATA SHEET

II. INGREDIENTS AND RECOMMENDED OCCUPATIONAL EXPOSURE LIMITS

Note: steel products under normal conditions do not present an inhalation, ingestion, or contact health hazard (see section VI).

BASE METAL, ALLOYING ELEMENTS AND METAL COATINGS	% WEIGHT	EXPOSURE LIMITS	
		OSHA PEL	ACGIH TLV
Base Metal: Iron (1309-37-1 as iron-oxide fume)	98-99	10 mg/M ³ for iron oxide fume	5 mg/M ³ for iron oxide fume
Alloying Elements:			
Carbon (7440-44-0)	.06-.13	None	None
	.14-.18	Established	Established
	.18-.23		
Manganese (7439-96-5)	.30-.60	(c) 5 mg/M ³	5 mg/M ³ -dust
	.70-1.15		1 mg/M ³ fume
Phosphorus (7723-14-0)	.015-.035	None for inorganic phosphates	None for Inorganic phosphates
	.040 max		
Sulfur as SO ₂ (7446-09-5)	.040 max	13 mg/M ³	5.2 mg/M ³
	.050 max		(c) 13 mg/M ³
Metallic Coating*			
Zinc (1314-13-2 as zinc oxide)	.070-6.0	5 mg/M ³	10 mg/M ³ -total
			ZnO dust
			5 mg/M ³
			Respirable ZnO
			Dust & fume
			(s) 10 mg/M ³

(c) denotes "ceiling limit" which is not to be exceeded at any time

(s) denotes Short Term Exposure Limit (STEL)

Varnish coating may be used; See Addendum II

*Galvanized pipe only.

NOTE: All commercial metals contain small amounts of various elements in addition to those specified. These small quantities, frequently referred to as "trace" or "residual" elements, generally originate in the raw materials used.

**WHEATLAND TUBE COMPANY
MATERIAL SAFETY DATA SHEET**

Page 3

III. PHYSICAL DATA

MELTING POINT		Appearance and Odor:
Base Metal:	2750 F	Metallic Gray
Metallic Coating:	800-900F	No Odor

IV. FIRE AND EXPLOSION HAZARD DATA

Steel products in the solid state present no fire or explosion hazard and do not contribute to the combustion of other products.

V. REACTIVITY DATA

Stable under normal conditions of use, storage and transport. Will react with strong acid to liberate hydrogen. At temperatures above the melting point of the coating, galvanized pipe may liberate zinc fumes.

VI. HEALTH HAZARD DATA

HMIS CODE: H = 1, F = 0, R = 0

NOTE: Steel products under normal conditions do not present an inhalation, ingestion, or contact health hazard. However, operations such as burning, welding, sawing, brazing, grinding, and possibly machining, etc. which result in elevating the temperature of the product to or above its melting point or results in the generation of airborne particulate, may present health hazards.

EFFECTS OF OVEREXPOSURE

**MAJOR EXPOSURE HAZARD
INHALATION**

Chronic inhalation of high concentration of iron oxide fumes or dusts may lead to a benign pneumoconiosis. Inhalation of high concentrations of ferric oxide may possibly enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens.

The inhalation of high concentrations of freshly formed oxide fumes and dusts of Manganese, Copper, Lead and/or Zinc in the respirable particle size range can cause an influenza-like illness termed metal fume fever. Typical symptoms last 12 to 48 hours and are characterized by metallic taste in the mouth, dryness and irritation in the throat, followed by weakness, muscle pain, fever and chills.

EMERGENCY AND FIRST AID PROCEDURES

For overexposure to airborne fumes and particulate, remove exposed person to fresh air. If breathing is difficult or has stopped, administer artificial respiration or oxygen as indicated. Seek medical attention promptly. Treat metal fume fever by bed rest and administer a pain and fever reducing medication. Seek medical attention.

VII. SPILL OR LEAK PROCEDURES

NOT APPLICABLE TO STEEL IN THE SOLID STATE.

**WHEATLAND TUBE COMPANY
MATERIAL SAFETY DATA SHEET**

Page 4

VII. SPECIAL PROTECTION INFORMATION

RESPIRATORY

NIOSH/MSHA-approved dust and fume respirators should be used to avoid excessive inhalation of particulate. Appropriate respirator selection depends on the magnitude of exposure.

SKIN:

Protective gloves should be worn as required for welding, burning, or handling operations.

EYE:

Use safety glasses or goggles as required for welding, burning, sawing, brazing, grinding, or machining operations.

VENTILATION:

Local exhaust ventilation should be provided when welding, burning, sawing, brazing, grinding, or machining to prevent excessive dust or fume exposure.

OTHER PROTECTIVE EQUIPMENT:

Depending upon the conditions of use and specific work situations, additional protective equipment and/or clothing may be required to control exposures.

IX. SPECIAL PRECAUTIONS

Operations with the potential for generating high concentrations of airborne particulate should be evaluated and controlled as necessary. Avoid breathing metal fumes and/or dusts.

OTHER COMMENTS:

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: individuals with chronic respiratory disorders (i.e.: asthma, chronic bronchitis, emphysema, etc.) may be adversely affected by any fume or airborne particulate matter exposure.

This information is taken from sources or based upon data believed to be reliable; however, Wheatland Tube Company makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.

WHEATLAND TUBE COMPANY
MATERIAL SAFETY DATA SHEET

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ADDENDUM 1

In compliance with U.S. Environmental Protection Agency regulations that became effective on January 1, 1989, this addendum is to inform you that the products covered by our Material Safety Data Sheet #268 contains one or more of the below listed chemicals that are subject to reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

Manganese Zinc Phosphorus

Refer to Section 2 of the Material Safety Data Sheet for the CAS numbers and percent by weight for each of the chemicals listed.

The above referenced law requires certain manufacturers to report annual emissions of specified toxic chemicals and chemical categories. If you are unsure if you must report or, if you require more information, call the EPA Emergency Planning and Community Right-To-Know Hotline (800)535-0202 or (202)479-2449 (in Washington, DC or Alaska).

**WHEATLAND TUBE COMPANY
MATERIAL SAFETY DATA SHEET**

ADDENDUM 2

RUST PREVENTATIVES AND PROTECTIVE COATINGS

Division	Product	Source
W	G4894-A Tinted Pipe Coating Paint	Ranbar Technology Inc, 1114 Wm. Flinn Highway Glenshaw, PA 15116 412-486-1111 1-800-486-1113
W	Sodium Bichromate	Occidental Chemical Corp. Occidental Tower PO Box 809050 Dallas, TX 75380 800-752-5151
W	Zinc Metal- Slabs	Noranda, Inc. 181 Bay Street, Suite 4100 P.O. Box 755 Toronto, Ontario Canada MSJ 2T3 416-982-7111
W	Zinc Metal- Slabs	Cominco 120 Adelaide Street West Suite 1700 Toronto, Ontario, Canada M5H 1T1 416-943-6263
W	Zinc Metal- Slabs	Allied Deal 180 Centennial Avenue Piscataway, NJ 08854 732-885-5991
W, C	Zinc Metal- Wire	Plat Brothers P.O. Box 1030 Waterbury, OH 06721 203-753-4191

**WHEATLAND TUBE COMPANY
MATERIAL SAFETY DATA SHEET**

ADDENDUM 2

RUST PREVENTATIVES AND PROTECTIVE COATINGS

Division	Product	Source
W	Zinc Metal Slabs	Zinc Corp. of America 300 Frankfort Road Monica, PA 15061 412-773-2216
W, LR W W	L4042A Pipe Coating Varnish L3843 Tinted Quick Dry Lead Free Varnish L 4137 Silver Thread Paint	Mahoning Paint Corp. PO Box 1282 Youngstown, OH 44501 216-744-2139
W	3M Scotchkote Fusion Bonded Epoxy Coating Brand 206N	3M Corporation 3M Austin Center 6801 River place Blvd Austin , Texas 78726-9000 800-722-6721
W	Future Fluids 2084	K.J. Dobay, Inc. 2021 Buckingham Drive Mars, PA 16046 724-779-1888
W	Polar RP 1135	Polar, Inc. 7031 corporate Way Dayton, Oh 45459 937 436 0099
W	TG Thread Compound	Sefco, Inc. 14813 Venture Drive Dallas, TX 75234 214-247-7418
W	Ease-On Pipe Joint Lubrication	Seacord Corporation 17 th & Mickle Streets Camden, NJ 08105 609-966-0440
W	Ferrocoat 112 DT	Quaker Chemical Corporation Elm and Lee Street Conshohocken, PA 19428 215-828-4250

**WHEATLAND TUBE COMPANY
MATERIAL SAFETY DATA SHEET**

ADDENDUM 2

RUST PREVENTATIVES AND PROTECTIVE COATINGS

Division	Product	Source
C	Zinc Metal- Slabs	Big River Zinc Route #3 Monsanto Avenue Sauget, IL 62201 618-274-5000
C, LR	Oakite Okemcoat F2	Oakite Products Inc. 50 Valley Road Berkeley Heights, NJ 07922 908-464-6900 1-800-526-4473
W C LR C, LR LR LR LR	Z888795 Clear OD Pipe Ctg KKC-00299 KXC-0048 AXA0442 WLA0086 KKC-0205 64 000WB-2	Valspar Corporation 1101 3 rd Street South Minneapolis, MN 55415 612-375-7371
C C C, LR C, LR C, LR LR	ID-103 ID-105 ID-109 ID-105 (modified-Al). OD-236 ID-111 Silver End Spray	Crest Industries, Ltd. 1066 Industry Road New Lenox, IL 60451 815-485-2138
LR	Zinc Metal –Slabs	Savage Zinc P.O. Box 1104 Clarksville, Tennessee 37041-1104 931-552-4200
LR	Water Base A.D. Thread Coating	Dura Coat Products 10938 Beech Ave. Fontana, CA 92337 909-823-2499
LR	Water Base A.D. Thread Coating	Dura Coat Products 10938 Beech Ave. Fontana, CA 92337 909-823-2499
C, LR C, LR C	W-1734 W-1735 V-1861-01	Thermoclad Corp 361 West 11 Street Erie, PA 16501 814-456-1243

LR	Rust Veto 343	Houghton International, Inc. P.O. Box 930 Valley forge, PA 19482 215-666-4105
W	Zinc Metal Slabs	Falconbridge Limited Kidds Creek Division Timmins, Ontario, Canada

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NO: CTA, CTA-1, CTB, CTB8, CTG, CTQ

PAGE: 1 OF 6

PRODUCT DESCRIPTION: CONTAX - OXIDE INHIBITING
COMPOUND

REVISION: 10

DATE PREPARED: March 24, 2010

DOCUMENT NUMBER: MSDS-0029

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME: CONTAX
GENERAL USE: SEALS ELECTRICAL CONNECTIONS FROM OXYGEN AND MOISTURE, NON-WATER SOLUBLE, NON-PETROLEUM BASED POLYMER GREASE.
PRODUCT DESCRIPTION: CONTAX - OXIDE INHIBITING COMPOUND.
GENERIC INGREDIENT: CASTOR OIL DERIVATIVE
FORMULA: PROPRIETARY COMPOUND.

24 HOUR EMERGENCY TELEPHONE NUMBERS: CHEMTREC (703) 527-3887 / (800) 424-9300
FOR PRODUCT INFORMATION: CALL THOMAS & BETTS; (901) 252-5000 ext. 8324

SECTION 2 HAZARDOUS INGREDIENTS

OSHA HAZARDOUS INGREDIENTS

<u>HAZARDOUS COMPONENTS</u>	<u>CAS #</u>	<u>% BY WT</u>	<u>ACGIH TLV</u>	<u>ACGIH TLV-C</u>	<u>ACGIH STEL</u>	<u>OSHA PEL</u>	<u>OTHER LIMITS OF EXPOSURE</u>
CASTOR OIL DERIVATIVE *	8001-79-4	70 - 90	N/A	N/A	N/A	N/A	N/A
CARBON BLACK	1333-86-4	< 0.5	N/A	N/A	N/A	3.5	N/A

NOTE:

FORMULATION IS A PROPRIETARY COMPOUND.

* ON THE CANADIAN INGREDIENT DISCLOSURE LIST, BUT NOT A CONTROLLED PRODUCT

SECTION 3 HEALTH INFORMATION & PROTECTION

CARCINOGENICITY

NTP? NONE LISTED
IARC MONOGRAPHS? NO EVALUATION
OSHA REGULATED? NOT REGULATED

ROUTES OF ENTRY

EYES? YES
INGESTION? YES
INHALATION? NO
SKIN? YES

EMERGENCY OVERVIEW

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NO: CTA, CTA-1, CTB, CTB8, CTG, CTQ

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PRODUCT DESCRIPTION: CONTAX - OXIDE INHIBITING
COMPOUND

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HEALTH HAZARDS

ACUTE: NONE KNOWN

CHRONIC: NONE KNOWN

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: NONE KNOWN

INGESTION: NONE KNOWN

INHALATION: NONE KNOWN

SKIN: NONE KNOWN

POTENTIAL HEALTH EFFECTS

EYES CONTACT: MAY CAUSE MINOR IRRITATION

INGESTION: MAY CAUSE GASTROINTESTINAL IRRITATION

INHALATION: NOT A LIKELY ROUTE OF ENTRY

SKIN CONTACT: MAY CAUSE MINOR IRRITATION

FIRST AID MEASURES

EYES CONTACT: WASH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSIST, SEEK MEDICAL ATTENTION.

INGESTION: SEEK MEDICAL ATTENTION IMMEDIATELY

INHALATION: N/A

SKIN CONTACT: WASH EXPOSED SKIN AREAS WITH SOAP AND WATER. IF REDNESS OR IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

MEDICAL CONDITION GENERALLY AGGRAVATED BY EXPOSURE

NONE KNOWN

WORKPLACE EXPOSURE CONTROLS

NONE REQUIRED

ENGINEERING / VENTILATION CONTROLS

NONE REQUIRED

PERSONAL PROTECTION

EYE PROTECTION: GOGGLES OR SAFETY GLASSES.

HAND PROTECTION: CHEMICAL RESISTANT GLOVES.

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

T&B CATALOG NO: CTA, CTA-1, CTB, CTB8, CTG, CTQ

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PRODUCT DESCRIPTION: CONTAX - OXIDE INHIBITING
COMPOUND

REVISION: 10

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RESPIRATORY PROTECTION: NONE REQUIRED UNDER NORMAL CONDITIONS.

SKIN PROTECTION: LONG SLEEVES OR PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN.

VENTILATION: USE IN OPEN, WELL VENTILATED AREA.

WORK/HYGIENIC: AS REQUIRED TO PREVENT DERMAL CONTACT. SAFETY SHOWER AND EYEWASH SHOULD BE PROVIDED.

SECTION 4 FIRE & EXPLOSION HAZARDS

AUTO-IGNITION TEMPERATURE: > 500° F (260° C)

EXPLOSION DATA: N/A

EXPLOSIVE PROPERTY: LEL: N/E UEL: N/E

EXTINGUISHING MEDIA: FOAM, CARBON DIOXIDE, DRY CHEMICAL

FIRE FIGHTING: STANDARD FIREMAN=S BODY PROTECTION AND SELF-CONTAINED BREATHING APPARATUS RECOMMENDED.

FLASH POINT: > 500° F (260° C) COC

HAZARDOUS COMBUSTION PRODUCTS: PRODUCTS OF INCOMPLETE COMBUSTION MAY INCLUDE CO, CO₂, AND DENSE BLACK SMOKE

EXPLOSION HAZARDS: KEEP CONTAINER TIGHTLY CLOSED AND AWAY FROM HEAT AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE. FIRE MAY PRODUCE A DENSE BLACK SMOKE AND SMALL QUANTITIES OF ISOCYANATES.

SECTION 5 SPILL CONTROL MEASURES

CONTAINMENT PROCEDURES: USE SAND, EARTH, SAWDUST OR OTHER ABSORBENT IF NECESSARY

CLEAN-UP PROCEDURES: SCOOP UP MATERIAL. USE SAND, EARTH, SAWDUST OR OTHER ABSORBENT IF NECESSARY.

EVACUATION PROCEDURES:

SPECIAL PROCEDURES:

DISPOSAL: INCINERATE OR DISPOSE IN AN APPROVED LANDFILL IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

SECTION 6 HANDLING & STORAGE

HANDLING PROCEDURES:

STORAGE PROCEDURES: STORE IN CLOSED CONTAINERS. PROTECT FROM CONTAMINATION WITH OTHER MATERIALS. DO NOT TRANSFER INTO UNMARKED CONTAINERS.

LABELING:

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

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SECTION 7 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	THICK GREASE	AUTO-IGNITION TEMPERATURE:	> 500° F (260° C)
BOILING POINT:	N/A	COLOR:	BLACK
FLAMMABILITY:	N/A	EVAPORATIVE RATE:	N/A
ODOR:	MILD	FREEZING POINT:	N/A
PERCENT, VOLATILE BY VOLUME:	NIL	MELTING POINT:	N/A
PH:	N/A	OXIDIZING PROPERTIES:	N/A
SOLUBILITY IN WATER 68°F (20° C):	INSOLUBLE	PERCENT, SOLIDS BY WEIGHT:	N/A
PHYSICAL STATE:	N/A		
SOFTENING POINT (FINISH):	N/A	SOFTENING POINT (BASE METAL):	N/A
VAPOR DENSITY (AIR = 1):	HEAVIER THAN AIR	SOLUBILITY IN ORGANIC SOLVENT:	N/A
VISCOSITY:	N/A	SPECIFIC GRAVITY (H₂O = 1):	0.90
VAPOR PRESSURE (mm Hg):	N/A	VOC CONTENT (lbs/gal):	N/A

SECTION 8 REACTIVITY DATA

CHEMICAL STABILITY: STABLE UNDER NORMAL CONDITIONS AND USE.

CONDITIONS TO AVOID: HEAT AND OPEN FLAME

INCOMPATIBLE MATERIALS: CONTACT WITH STRONG OXIDIZING CHEMICAL

HAZARDOUS DECOMPOSITION PRODUCTS: PRODUCTS OF INCOMPLETE COMBUSTION MAY INCLUDE CO, CO₂, AND DENSE BLACK SMOKE AND SMALL QUANTITIES OF ISOCYANATES

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 9 REGULATORY INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT)

PROPER SHIPPING NAME: NOT REGULATED

MATERIAL SAFETY DATA SHEET

THOMAS & BETTS CORPORATION, 8155 T&B BOULEVARD, MEMPHIS, TENNESSEE 38125

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I.A.T.A. CLASSIFICATION

PROPER SHIPPING
NAME: NOT REGULATED

U.S. FEDERAL REGULATIONS

TSCA: ALL COMPONENTS ARE INCLUDED IN THE EPA TOXIC SUBSTANCE CONTROL ACT (TSCA) CHEMICAL SUBSTANCE INVENTORY.

CERCLA: THE PRODUCT IS NOT CLASSIFIED AS A HAZARDOUS SUBSTANCE UNDER REGULATIONS OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA), 40 CFR §302.

RCRA HAZARD CLASS: THE PRODUCT IS NOT CLASSIFIED AS A HAZARDOUS WASTE UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT, OR ITS REGULATIONS, 40 CFR §261 *et seq.*

CLEAN AIR ACT: THE PRODUCT IS NOT PROCESSED WITH OR DOES NOT CONTAIN ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCES.

SARA TITLE III INFORMATION

SECTION 302: NO COMPONENT(S) OF THIS MATERIAL WITH KNOWN CAS NUMBER ARE ON THE EXTREMELY HAZARDOUS SUBSTANCE (EHS) LIST.

SECTION 311 / 312: THE FOLLOWING COMPONENT(S) OF THIS PRODUCT IS SUBJECT TO THIS REQUIREMENT: *NONE*

SECTION 313: THE FOLLOWING COMPONENT(S) OF THIS PRODUCT IS SUBJECT TO THIS REQUIREMENT: *NONE*

STATE REGULATIONS / RIGHT-TO-KNOW

CALIFORNIA
PROPOSITION 65
INFORMATION:

THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCE(S) KNOWN TO BE ON THE CA PROP. 65 LIST: *NONE*

INTERNATIONAL

WHMIS (CANADA): THIS PRODUCT HAS BEEN CLASSIFIED ACCORDING TO THE HAZARD CRITERIA OF THE CONTROLLED PRODUCTS REGULATIONS AND THE MSDS CONTAINS ALL OF THE INFORMATION REQUIRED BY THE CPR

THE CHEMICAL(S) LISTED ARE CONSIDERED CONTROLLED PRODUCT(S):

CASTOR OIL, CAS NO. 8001-79-4 IS REQUIRED BY THE CANADIAN INGREDIENT DISCLOSURE LIST, BUT *NOT* A CONTROLLED PRODUCT.

LABELS: CANADIAN LABEL CLASSIFICATION REQUIRED ON CONTAINER(S): *NONE*

SECTION 10 NOTES

TOXICOLOGICAL INFORMATION

NONE

ECOLOGICAL INFORMATION

NO DATA AVAILABLE

MATERIAL SAFETY DATA SHEET

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HAZARD RATING SYSTEM

	HMIS	NFPA	KEY
HEALTH	1	1	4 = SEVERE
FLAMMABILITY	1	1	3 = SERIOUS
REACTIVITY	0	0	2 = MODERATE
			1 = SLIGHT
			0 = MINIMAL

REVISION SUMMARY

10

SUPERCEDES ISSUE DATE

March 24, 2004

SECTION 11 OTHER INFORMATION

ABBREVIATIONS

N/E: NOT ESTABLISHED
N/A: NOT AVAILABLE

OTHER

R PHRASE: N/A

S PHRASE: N/A

T&B CATALOG NOS:

CTA
CTA-1
CTB
CTB8
CTG
CTQ

THE INFORMATION PRESENTED HEREIN HAS BEEN COMPILED FROM SOURCES CONSIDERED TO BE DEPENDABLE AND ACCURATE TO THE BEST OF THOMAS & BETTS CORPORATION KNOWLEDGE. THE INFORMATION RELATES TO THE SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE.

1. PRODUCT and COMPANY INFORMATION

PRODUCT	* KOPR-SHIELD [®] Anti-Seize Lubricant	EMERGENCY TELEPHONE NUMBER	
CATALOG NUMBERS	CP8-TB, CP16, CP128, 201-31879, 201-31879-1	CHEMTREC:	800-424-9300
MANUFACTURER / SUPPLIER	THOMAS & BETTS CORPORATION	TELEPHONE NUMBER FOR INFORMATION	901-252-5000 ext. 8324
ADDRESS	8155 T & B BOULEVARD, MEMPHIS, TENNESSEE 38125	DATE OF REVISION or PREPARATION	APRIL 27, 2012

2. COMPOSITION / INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	CAS #	% BY WT	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA PEL	OSHA STEL
PETROLEUM OIL	64742-57-0 64742-62-7	60 - 68	N/A	N/A	10 mg/m ³	OIL MIST TWA - 5 mg/m ³	STEL: 10 mg/m ³
COPPER POWDER	7440-50-8	25 - 35	N/A	N/A	10 mg/m ³	1 mg/m ³	STEL: 2 mg/m ³
ALKYLENE CARBONATE	108-32-7	0 - 1	N/A	N/A	N/A	TWA - 5 mg/m ³	N/A
BENTONE	68953-58-2	2 - 5	N/A	N/A	N/A	N/A	N/A
ZINC DITHIOCARBAMATE	15337-18-5	< 0.5	N/A	N/A	N/A	N/A	N/A

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	NONE KNOWN
ROUTES OF EXPOSURE	SIGNS and SYMPTOMS
EYES:	MAY CAUSE IRRITATION TO THE EYE(s)
INGESTION:	MAY CAUSE DIARRHEA
INHALATION:	VISCOUS NATURE MAY BLOCK BREATHING PASSAGES IF INHALED
SKIN:	MAY IRRITATE THE SKIN AFTER PROLONGED PERIODS OF CONTACT

4. FIRST AID MEASURES

ROUTES OF ENTRY	FIRST AID INSTRUCTIONS
EYE CONTACT:	REMOVE CONTACT LENS AND RINSE THE AFFECTED EYE IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION
INGESTION:	WASH OUT MOUTH IMMEDIATELY. SEEK MEDICAL ATTENTION IMMEDIATELY
INHALATION:	CLEAR AIR PASSAGES. IF RESPIRATORY DIFFICULTY CONTINUES, SEEK MEDICAL ATTENTION IMMEDIATELY
SKIN CONTACT:	WASH THOROUGHLY WITH HAND CLEANER, FOLLOWED BY SOAP AND WATER. ALL CONTAMINATED CLOTHING SHOULD BE DRY CLEANED BEFORE REUSE. IF REDNESS OR IRRITATION PERSISTS, SEEK MEDICAL ATTENTION

5. FIRE FIGHTING MEASURES

EXPLOSION DATA:	N/A
FLAMMABILITY:	LEL: 0.9 UEL: 7.0
EXTINGUISHING MEDIA:	FOAM, DRY POWDER, HALON [®] , CARBON DIOXIDE, SAND, EARTH AND WATER MIST
UNSUITABLE EXTINGUISHING MEDIA	WATER JET
FIRE FIGHTING:	FULL PROTECTIVE EQUIPMENT, INCLUDING SELF-CONTAINED BREATHING APPARATUS, IS RECOMMENDED.
FLASH POINT:	> 560° F (293° C)
HAZARDOUS COMBUSTION PRODUCTS:	N/A

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTION:	WEAR NITRILE GLOVES & PROTECTIVE OVERALLS
CONTAINMENT PROCEDURES:	SCRAPE UP BULK. THEN WIPE UP REMAINDER WITH CLOTH AND PICK UP REMAINING RESIDUE WITH DIATOMACEOUS EARTH TO AVOID A WALKING HAZARD
NEUTRALIZING AGENT:	NONE
ENVIRONMENTAL PRECAUTIONS:	DO NOT ALLOW IT TO ENTER DRAINS
DISPOSAL:	DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. DO NOT INCINERATE. CONTACT WASTE DISPOSAL COMPANY OR LOCAL AUTHORITY FOR ADVICE.
CONTAINER DISPOSAL:	PAIL WITHOUT PLASTIC LINER AND PLASTIC LINERS: DO NOT INCINERATE. CONTACT WASTE DISPOSAL COMPANY OR LOCAL AUTHORITY FOR ADVICE PAILS WITH PLASTIC LINER: PAIL CAN BE DISPOSED OF VIA STANDARD WASTE DISPOSAL SERVICES, RECYCLED OR REUSED.

7. HANDLING and STORAGE

HANDLING PROCEDURES: NO SPECIAL HANDLING PRECAUTIONS NECESSARY
STORAGE PROCEDURES: DO NOT STORE AT ELEVATED TEMPERATURES

8. EXPOSURE CONTROL / PERSONAL PROTECTION

EXPOSURE CONTROLS: NONE REQUIRED

PERSONAL PROTECTION

EYE PROTECTION: SAFETY GLASSES OR GOGGLES, IF APPLIED TO MOVING PARTS IN MOTION
HAND PROTECTION: PROTECTIVE GLOVES FOR HYPERSENSITIVE PERSONS
RESPIRATORY PROTECTION: NONE REQUIRED
SKIN PROTECTION: GLOVES, OVERALLS, APRON AND/OR LONG SLEEVES CLOTHING TO PROTECT THE SKIN
VENTILATION: NONE REQUIRED

9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE: SEMI-SOLID PASTE	AUTO-IGNITION TEMPERATURE: > 680° F (360° C)
BOILING POINT: > 700° F (370° C)	COLOR: COPPER
DENSITY (lbs/gal): N/A	EVAPORATION RATE (BUTYL ACETATE = 1): < 0.01
FLAMMABILITY: NOT FLAMMABLE AT AMBIENT TEMPERATURES	ODOR: PETROLEUM
MELTING POINT: N/A	PERCENT, VOLATILE BY WEIGHT (%): N/A
PERCENT, SOLIDS BY WEIGHT (%): N/A	PHYSICAL STATE: SEMI-SOLID
PH: N/A	SPECIFIC GRAVITY (H₂O = 1): 1.2
SOLUBILITY IN WATER @ 68° F (20° C): NIL	VAPOR PRESSURE OF PRINCIPAL SOLVENT: ≤ 0.01
VAPOR DENSITY OF PRINCIPAL SOLVENT (AIR = 1): > 5	VOC CONTENT (lbs / gal): NIL
VISCOSITY: N/A	

10. STABILITY and REACTIVITY

CHEMICAL STABILITY: STABLE UNDER NORMAL CONDITIONS. NO PHOTOREACTIVE AGENTS.
CONDITIONS TO AVOID: POWERFUL SOURCE OF IGNITION AND EXTREME TEMPERATURES.
INCOMPATIBLE MATERIALS: STRONG INORGANIC AND ORGANIC ACIDS AND OXIDIZING AGENTS
HAZARDOUS DECOMPOSITION PRODUCTS: BURNING GENERATES SMOKE, AIRBORNE SOOT, HYDROCARBONS AND OXIDES OF CARBON. RESIDUE MAINLY COMPRISED OF SOOT AND METAL OXIDES
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: NOT KNOWN	ALLERGENS: NONE KNOWN
CHRONIC TOXICITY: NONE KNOWN	IRRITANCY – SKIN: VERY MILD
GENOTOXICITY: NONE KNOWN	EC CLASSIFICATION (67 /548 EEC): NO
EC ANNEX 1 CLASSIFICATION: NOT APPLICABLE	S PHRASES: NONE APPLICABLE, AS KNOWN
R PHRASES: R22 – HARMFUL IF SWALLOWED	SUB-ACUTE / SUB-CHRONIC TOXICITY: NOT KNOWN
SKIN SENSITIZATION: NOT KNOWN	LD-50: N/A
LC-50: 1.98 g/l, (mysidopsis bahia) BASED ON ASSESSMENT FROM RELATED PRODUCTS.	

CARCINOGENICITY

NTP: NO
IARC MONOGRAPHS: NO
OSHA REGULATED: NO

ACUTE: REDNESS AND IRRITATION OF THE SKIN. REPEATED SKIN CONTACT FOR PERSONS HYPERSENSITIVE TO PETROLEUM PRODUCTS CAN CAUSE REDNESS AND IRRITATION OF SKIN
CHRONIC: NONE KNOWN

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION

POSSIBLE EFFECTS: MAY GENERATE OIL FRACTIONS AND RELEASE COPPER THAT COULD ACT AS A MARINE POLLUTANT IN EXTREME CASES, BUT IS HIGHLY UNLIKELY.
BEHAVIOR: RELATIVELY WELL BEHAVED. BIOACCUMULATION POTENTIAL NIL.
ENVIRONMENTAL FATE: HIGHLY UNLIKELY TO CAUSE NOTABLE CONTAMINATION. HEAVIER THAN WATER.

13. DISPOSAL CONSIDERATION

DISPOSE OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS AND DO NOT INCINERATE.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT)

PROPER SHIPPING NAME: NOT REGULATED

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA: ALL COMPONENTS ARE INCLUDED IN THE EPA TOXIC SUBSTANCES CONTROL ACT (TSCA) CHEMICAL SUBSTANCES INVENTORY.
CLEAN AIR ACT: THE FOLLOWING COMPONENTS OF THIS PRODUCT ARE REGULATED AS HAPs: *NONE*

SARA TITLE III INFORMATION

SECTION 302: THERE ARE NO COMPONENTS OF THIS PRODUCT WITH KNOWN CAS NUMBERS WHICH ARE ON THE 40 CFR PART 355 APPENDIX A LIST OF EXTREMELY HAZARDOUS SUBSTANCES.
SECTION 311 / 312: REQUIRES EMERGENCY PLANNING BASED ON *THRESHOLD PLANNING QUANTITIES* (TPQs), AND RELEASE REPORTING BASED ON *REPORTABLE QUANTITIES* (RQs) OF HAZARDOUS MATERIALS LISTED IN SECTION 2:
SECTION 313: THIS PRODUCT CONTAINS CHEMICAL COMPONENTS SUBJECT TO SECTION 313 REPORTING:
CHEMICALS **CAS #**
 COPPER POWDER 7440-50-8

STATE REGULATIONS / RIGHT-TO-KNOW

CALIFORNIA PROPOSITION 65 INFORMATION: THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCE(S) KNOWN TO BE ON THE CA PROP. 65 LIST: *NONE*

INTERNATIONAL

EC ANNEX 1 CLASSIFICATION: NOT APPLICABLE – **R PHRASES:** R22 – HARMFUL IF SWALLOWED; **S PHRASES:** N/A
WHMIS (CANADA): THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL(S) LISTED AS CONTROLLED SUBSTANCES:
CHEMICALS **CAS #**
 ALKLENE CARBONATE 108-32-7
LABELS: CANADIAN LABEL CLASSIFICATION REQUIRED ON CONTAINER(S): *D2B*

16. OTHER INFORMATION

HAZARD RATING SYSTEM:

	HMIS	NFPA	KEY
HEALTH	1	1	4 = SEVERE
FLAMMABILITY	1	1	3 = SERIOUS
REACTIVITY	1	1	2 = MODERATE
			1 = SLIGHT
			0 = MINIMAL

REVISION SUMMARY 4
SUPERCEDES ISSUE DATE April 28, 2009

17. T&B CATALOG NUMBERS / PRODUCT NUMBERS

TO BE USED IF SECTION 1 DOES NOT HAVE SPACE TO LIST T&B CATALOG NUMBERS.

THE INFORMATION PRESENTED HEREIN HAS BEEN COMPILED FROM SOURCES CONSIDERED TO BE DEPENDABLE AND ACCURATE TO THE BEST OF THOMAS & BETTS CORPORATION KNOWLEDGE. THE INFORMATION RELATES TO THE SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY HIMSELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE.

MATERIAL SAFETY DATA SHEET

Section 1 – Product & Company Identification

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil
Product Catalog No.: 41565, 70835, 41575, 41585

Company Name.....: Ridge Tool Company
Address: 400 Clark Street
: Elyria, Ohio 44035-6001
Telephone: 1-800-519-3456 (USA) (8:00 am – 5:00 pm EST, M-F)
Emergency Telephone: call 9-1-1 or local emergency number
Website: www.RIDGID.com

Issue Date: September 6, 2011

Section 2 – Hazards Identification

EMERGENCY OVERVIEW:

This product is a liquid that is insoluble in water. Direct eye contact may cause minor, short term irritation. Short term skin exposure is not expected to be irritating. Inhalation and ingestion are not anticipated routes of exposure during normal conditions of use.

POTENTIAL HEALTH EFFECTS AND SYMPTOMS FROM SHORT TERM / ACUTE EXPOSURE:

- **Eye**
This product is not expected to cause eye irritation under normal conditions of use. Symptoms of slight eye irritation may result when direct contact occurs, or when exposed to high mist levels in poorly ventilated areas.
- **Skin**
Short term skin contact is not expected to cause skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation and redness. In severe cases, prolonged or repeated contact may result in dermatitis accompanied by symptoms of irritation, itching, dryness, cracking and/or inflammation.

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil

- Inhalation:
This product has low volatility and so is not expected to cause respiratory tract irritation during normal conditions of use. Exposure to high mist levels in poorly ventilated areas may cause upper respiratory tract irritation and difficulty breathing.
- Ingestion:
Ingestion may cause slight stomach irritation and discomfort.
- Potential Chronic Health Effects
No further data known.
- Medical Conditions Aggravated By Exposure:
No further data known.
- Carcinogenicity:
This product is not listed as a known or suspected carcinogen by IARC, OSHA or the NTP.

HMIS RATING:

Health	Flammability	Reactivity	PPE
1	1	0	X

Section 3 – Composition / Information On Ingredients

Components listed in this section may contribute to the potential hazards associated with exposure to the concentrate. The product may contain additional non-hazardous or trade secret components.

<u>Component:</u>	<u>CAS #</u>	<u>% By Weight</u>
Mineral Oil	64742-54-7	> 95
Sulfur Additive Package	Mixture	< 5

This product does not contain silicone.

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil

Section 4 – First Aid Measures

EYE CONTACT:

Upon direct eye contact, hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. If irritation is due to exposure to mist or vapors, remove the individual to fresh air. If irritation persists, flush the eyes with clean water until the irritation subsides. If symptoms persist, contact a physician.

SKIN CONTACT:

Remove product from the skin by washing with a mild soap and water. Contaminated clothing should be removed to prevent prolonged exposure. If symptoms of exposure persist, contact a physician.

INHALATION:

Inhalation is not an expected route of exposure. If respiratory irritation or distress occurs, remove the employee to fresh air. Contact a physician or other medical professional if irritation or distress persists.

INGESTION:

If small amounts are ingested, first aid measures are not likely to be necessary. If larger amounts are ingested or if symptoms of ingestion occur, dilute stomach contents with two glasses of water or milk. (NOTE: Do NOT give anything by mouth to an unconscious person.) Do not induce vomiting without medical supervision. If vomiting occurs spontaneously, keep airway clear. If symptoms of ingestion persist, seek medical attention.

Section 5 – Fire Fighting Measures

FIRE AND EXPLOSIVE PROPERTIES:

Flashpoint.....: 385°F Cleveland Open Cup
Flammability Limits: LEL - N/A
UEL - N/A

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil

EXTINGUISH MEDIA:

In accordance with NFPA guidance, dry chemical, foam or CO2 fire extinguishers are all acceptable. Note that while water fog extinguishers are also acceptable, do NOT apply a direct stream of water onto burning product because it may cause spreading and increase fire intensity.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

No further data known.

FIRE-FIGHTING PROCEDURES AND EQUIPMENT:

Emergency responders in the danger area should wear bunker gear and self-contained breathing apparatus for fires beyond the incipient stage. See Section 8 of the MSDS for other PPE to be worn as conditions warrant.

Section 6 – Accidental Release Measures

PERSONAL PRECAUTIONS:

Use personal protection recommended in Section 8.

ENVIRONMENTAL:

This material is a water pollutant. Do not let spilled or leaking material enter waterways.

CLEAN-UP MEASURES:

Important: As with any spill or leak, before responding, ensure that you are familiar with the potential hazards and recommendations of the MSDS. Appropriate personal protective equipment must be worn.

If possible, safely contain the spill with dikes or other spill response equipment appropriate for petroleum or organic material releases. Take measures to prevent spreading of product. Note that while product will ignite, it will not readily burn. However, as a precaution, eliminate ignition sources. Prevent from entering sewers or waterways. Large volumes may be transferred to an appropriate container for proper disposal. Small volumes or residues may be soaked up with absorbents. Spill response materials should be collected for proper disposal.

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil

Section 7 – Handling And Storage

HANDLING:

As with any industrial chemical, handle the product in a manner that minimizes exposure to practicable levels. Prior to handling, consult Section 8 of this MSDS to evaluate personal protective equipment needs. Open containers slowly to relieve any pressure. Follow all other standard industrial hygiene practices.

Empty containers may contain product residue. All safety precautions taken when handling this product should also be taken when handling empty drums and containers. Keep containers closed when not in use.

Product residue in empty containers is combustible but will not readily burn. Note, however, that excessive heating or cutting of empty containers may create an ignition source sufficient to start a fire and, in extreme cases, cause an explosion.

STORAGE:

Protect product quality by storing indoors and away from extreme temperatures. Close all containers when not in use.

Section 8 – Exposure Controls / Personal Protection

EXPOSURE GUIDELINES:

Component

Mineral Oil	ACGIH TLV: ACGIH STEL: OSHA PEL:	5 mg / m3 (as mist) 10 mg / m3 (as mist) 5 mg / m3 (as mist)
Sulfur Additive Package	No information	

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil

ENGINEERING CONTROLS:

Normal general ventilation is expected to be adequate. It is recommended that ventilation be designed in all instances to maintain airborne concentrations at lowest practicable levels. Ventilation should, at a minimum, prevent airborne concentrations from exceeding any exposure limits.

The user may wish to refer to 29 CFR 1910.1000(d) (2) and the ACGIH "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices" (Appendix C) for the determination of exposure limits of mixtures. An industrial hygienist or similar professional may be consulted to confirm that the calculated exposure limits apply.

PERSONAL PROTECTIVE EQUIPMENT:

Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA's Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I. The following information may be used to assist in PPE selection.

- **Eye Protection**
Wear eye protection appropriate to prevent eye exposure. Where splashing is not likely, chemical safety glasses with side shields are recommended. Where splashing may occur, chemical goggles or full face shield is recommended.
- **Skin Protection**
Gloves are not normally needed during normal conditions of use. If health effects are experienced, oil or chemical resistant gloves such as butyl or nitrile are recommended. Where splashing or soaking is likely, wear oil or chemical resistant clothing to prevent exposure.
- **Respiratory Protection**
A respirator may be worn to reduce exposure to vapors, dust or mist. Select a NIOSH/MSHA approved respirator appropriate for the type and physical character of the airborne material. A self-contained breathing apparatus is recommended in all situations where airborne contaminant concentration has not been confirmed to be below safe levels. Respirator use should comply with the OSHA Respirator Protection Standard found in 29 CFR 1910.134.
- **General Hygiene Considerations**
Wash thoroughly after handling.

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil

Section 9 – Physical And Chemical Properties

Physical Appearance.....: Clear Yellow
Odor.....: Mild Petroleum
Physical State.....: Liquid
Water Solubility.....: Insoluble
Specific Gravity.....: .878
VOC.....: 2%

Section 10 – Stability And Reactivity

STABILITY:

This product is stable at room temperature.

CONDITIONS TO AVOID:

Avoid contact with incompatible materials and exposure to extreme temperatures.

INCOMPATIBLE MATERIALS:

This product is incompatible with strong oxidizing agents.

DECOMPOSITION PRODUCTS MAY INCLUDE:

Thermal decomposition products are dependent on combustion conditions. A complex mixture of airborne solid, liquid, particulates and gasses may evolve when the material burns. Combustion by-products may include:

oxides of carbon

oxides of sulfur

incompletely burned hydrocarbons as fumes and smoke

POSSIBILITY OF HAZARDOUS REACTIONS:

This product is not expected to polymerize

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil

Section 11 – Toxicological Information

ACUTE:

Oral LD₅₀: Not determined

Inhalation LC₅₀: Not determined

CHRONIC: No further toxicological data known.

SENSITIZATION: No further toxicological data known.

REPRODUCTIVE EFFECTS: No further toxicological data known.

TERATOGENIC EFFECTS: No further toxicological data known.

MUTAGENICITY: No further toxicological data known.

SYNERGISTIC MATERIALS: No further toxicological data known.

CARCINOGENICITY: This product is not listed as a known or suspected carcinogen by IARC, OSHA or the NTP.

Section 12 – Ecological Information

ECOTOXICOLOGICAL INFORMATION:

This product has not been evaluated for ecotoxicity. As with any industrial chemical, exposure to the environment should be prevented and minimized wherever possible.

ENVIRONMENTAL FATE:

The degree of biodegradability and persistence of this product has not been determined.

VOC CONTENT:

2%

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil

Section 13 – Disposal Consideration

WASTE DISPOSAL:

Ensure that collection, transport, treatment and disposal of waste product and containers complies with all applicable laws and regulations. Note that use, mixture, processing or contamination of the product may cause the material to be classified as a hazardous waste. It is the responsibility of the product user or owner to determine at the time of disposal whether the product is regulated as a hazardous waste.

Section 14 – Transportation Information

U.S. DOT HAZARDOUS MATERIAL INFORMATION:

Not DOT regulated.

CANADA TRANSPORT OF DANGEROUS GOODS:

This material is not TDG regulated.

Section 15 – Regulatory Information

FEDERAL REGULATIONS:

SARA 313:

This product contains NONE of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CLEAN WATER ACT:

This product contains mineral oil and is subject to regulation by Section 311 of the Clean Water Act and the Oil Pollution Act. Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil

CERCLA REPORTABLE QUANTITY:

Any components listed below have been assigned a reportable quantity (RQ) by the Federal EPA. Releases of the product into the environment that exceed the RQ for a particular component must be reported to the National Response Center at 1-800-424-8802.

None to report

TOXIC SUBSTANCE CONTROL ACT:

The components of this product are listed on the TSCA Inventory.

OZONE DEPLETING SUBSTANCES:

This product contains no ozone depleting substances as defined by the Clean Air Act.

HAZARDOUS AIR POLLUTANTS:

Any components listed below are defined by the Federal EPA as hazardous air pollutants:

None to report

STATE REGULATIONS

This product contains mineral oil, and as used, may be regulated by state used oil regulations. Check with the appropriate state agency to determine whether such a regulation exists.

CANADA

WHMIS Classification: Not controlled under WHMIS

DSL:

The components of this product are listed on DSL Inventory.

Product Name.....: RIDGID Nu-Clear Thread Cutting Oil

Section 16 – Other Information

Prepared by:..... Ridge Tool Company

Issue Date: September 6, 2011

Last Revision Date: September 30, 2009

RIDGE TOOL BELIEVES THE STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE RELIABLE BUT THEY ARE GIVEN WITHOUT WARRANTY OR GUARANTEE OF ANY KIND, EXPRESSED OR IMPLIED, AND WE ASSUME NO RESPONSIBILITY FOR ANY LOSS, DAMAGE OR EXPENSE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THEIR USE.

MATERIAL SAFETY DATA SHEET

Section 1 – Product & Company Identification

Product Name.....: RIDGID Dark Thread Cutting Oil
Product Catalog No.: 41590, 70830, 41610, 41600

Company Name.....: Ridge Tool Company
Address: 400 Clark Street
: Elyria, Ohio 44035-6001
Telephone: 1-800-519-3456 (USA) (8:00 am – 5:00 pm EST, M-F)
Emergency Telephone: call 9-1-1 or local emergency number
Website: www.RIDGID.com

Issue Date: October 7, 2011

Section 2 – Hazards Identification

EMERGENCY OVERVIEW:

This product is a liquid that is insoluble in water. Direct eye contact may cause minor, short term irritation. Short term skin exposure is not expected to be irritating. Inhalation and ingestion are not anticipated routes of exposure during normal conditions of use.

POTENTIAL HEALTH EFFECTS AND SYMPTOMS FROM SHORT TERM / ACUTE EXPOSURE:

- **Eye**
This product is not expected to cause eye irritation under normal conditions of use. Symptoms of slight eye irritation may result when direct contact occurs, or when exposed to high mist levels in poorly ventilated areas.
- **Skin**
Short term skin contact is not expected to cause skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation and redness. In severe cases, prolonged or repeated contact may result in dermatitis accompanied by symptoms of irritation, itching, dryness, cracking and/or inflammation.
- **Inhalation:**
This product has low volatility and so is not expected to cause respiratory tract irritation during normal conditions of use. Exposure to high mist levels in poorly ventilated areas may cause upper respiratory tract irritation and difficulty breathing.

Product Name.....: RIDGID Dark Thread Cutting Oil

- Ingestion:
Ingestion may cause slight stomach irritation and discomfort.
- Potential Chronic Health Effects
No further data known.
- Medical Conditions Aggravated By Exposure:
No further data known.
- Carcinogenicity:
This product is not listed as a known or suspected carcinogen by IARC, OSHA or the NTP.

HMIS RATING:

Health	Flammability	Reactivity	PPE
1	1	0	X

Section 3 – Composition / Information On Ingredients

Components listed in this section may contribute to the potential hazards associated with exposure to the concentrate. The product may contain additional non-hazardous or trade secret components.

<u>Component:</u>	<u>CAS #</u>	<u>% By Weight</u>
Mineral Oil	64742-54-7	> 90
Sulfur Additive Package	Mixture	< 10

This product does not contain silicone.

Product Name.....: RIDGID Dark Thread Cutting Oil

Section 4 – First Aid Measures

EYE CONTACT:

Upon direct eye contact, hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. If irritation is due to exposure to mist or vapors, remove the individual to fresh air. If irritation persists, flush the eyes with clean water until the irritation subsides. If symptoms persist, contact a physician.

SKIN CONTACT:

Remove product from the skin by washing with a mild soap and water. Contaminated clothing should be removed to prevent prolonged exposure. If symptoms of exposure persist, contact a physician.

INHALATION:

Inhalation is not an expected route of exposure. If respiratory irritation or distress occurs, remove the employee to fresh air. Contact a physician or other medical professional if irritation or distress persists.

INGESTION:

If small amounts are ingested, first aid measures are not likely to be necessary. If larger amounts are ingested or if symptoms of ingestion occur, dilute stomach contents with two glasses of water or milk. (NOTE: Do NOT give anything by mouth to an unconscious person.) Do not induce vomiting without medical supervision. If vomiting occurs spontaneously, keep airway clear. If symptoms of ingestion persist, seek medical attention.

Section 5 – Fire Fighting Measures

FIRE AND EXPLOSIVE PROPERTIES:

Flashpoint.....: 385°F Cleveland Open Cup
Flammability Limits.....: LEL - N/A
UEL - N/A

Product Name.....: RIDGID Dark Thread Cutting Oil

EXTINGUISH MEDIA:

In accordance with NFPA guidance, dry chemical, foam or CO2 fire extinguishers are all acceptable. Note that while water fog extinguishers are also acceptable, do NOT apply a direct stream of water onto burning product because it may cause spreading and increase fire intensity.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

No further data known.

FIRE-FIGHTING PROCEDURES AND EQUIPMENT:

Emergency responders in the danger area should wear bunker gear and self-contained breathing apparatus for fires beyond the incipient stage. See Section 8 of the MSDS for other PPE to be worn as conditions warrant.

Section 6 – Accidental Release Measures

PERSONAL PRECAUTIONS:

Use personal protection recommended in Section 8.

ENVIRONMENTAL:

This material is a water pollutant. Do not let spilled or leaking material enter waterways.

CLEAN-UP MEASURES:

Important: As with any spill or leak, before responding, ensure that you are familiar with the potential hazards and recommendations of the MSDS. Appropriate personal protective equipment must be worn.

If possible, safely contain the spill with dikes or other spill response equipment appropriate for petroleum or organic material releases. Take measures to prevent spreading of product. Note that while product will ignite, it will not readily burn. However, as a precaution, eliminate ignition sources. Prevent from entering sewers or waterways. Large volumes may be transferred to an appropriate container for proper disposal. Small volumes or residues may be soaked up with absorbents. Spill response materials should be collected for proper disposal.

Product Name.....: RIDGID Dark Thread Cutting Oil

Section 7 – Handling And Storage

HANDLING:

As with any industrial chemical, handle the product in a manner that minimizes exposure to practicable levels. Prior to handling, consult Section 8 of this MSDS to evaluate personal protective equipment needs. Open containers slowly to relieve any pressure. Follow all other standard industrial hygiene practices.

Empty containers may contain product residue. All safety precautions taken when handling this product should also be taken when handling empty drums and containers. Keep containers closed when not in use.

Product residue in empty containers is combustible but will not readily burn. Note, however, that excessive heating or cutting of empty containers may create an ignition source sufficient to start a fire and, in extreme cases, cause an explosion.

STORAGE:

Protect product quality by storing indoors and away from extreme temperatures. Close all containers when not in use.

Section 8 – Exposure Controls / Personal Protection

EXPOSURE GUIDELINES:**Component**

Mineral Oil	ACGIH TLV:	5 mg / m ³ (as mist)
	ACGIH STEL:	10 mg / m ³ (as mist)
	OSHA PEL:	5 mg / m ³ (as mist)
Sulfur Additive Package	No information	

Product Name.....: RIDGID Dark Thread Cutting Oil

ENGINEERING CONTROLS:

Normal general ventilation is expected to be adequate. It is recommended that ventilation be designed in all instances to maintain airborne concentrations at lowest practicable levels. Ventilation should, at a minimum, prevent airborne concentrations from exceeding any exposure limits.

The user may wish to refer to 29 CFR 1910.1000(d) (2) and the ACGIH "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices" (Appendix C) for the determination of exposure limits of mixtures. An industrial hygienist or similar professional may be consulted to confirm that the calculated exposure limits apply.

PERSONAL PROTECTIVE EQUIPMENT:

Selection of personal protective equipment should be based upon the anticipated exposure and made in accordance with OSHA's Personal Protective Equipment Standard found in 29 CFR 1910 Subpart I. The following information may be used to assist in PPE selection.

- **Eye Protection**
Wear eye protection appropriate to prevent eye exposure. Where splashing is not likely, chemical safety glasses with side shields are recommended. Where splashing may occur, chemical goggles or full face shield is recommended.
- **Skin Protection**
Gloves are not normally needed during normal conditions of use. If health effects are experienced, oil or chemical resistant gloves such as butyl or nitrile are recommended. Where splashing or soaking is likely, wear oil or chemical resistant clothing to prevent exposure.
- **Respiratory Protection**
A respirator may be worn to reduce exposure to vapors, dust or mist. Select a NIOSH/MSHA approved respirator appropriate for the type and physical character of the airborne material. A self-contained breathing apparatus is recommended in all situations where airborne contaminant concentration has not been confirmed to be below safe levels. Respirator use should comply with the OSHA Respirator Protection Standard found in 29 CFR 1910.134.
- **General Hygiene Considerations**
Wash thoroughly after handling.

Product Name.....: RIDGID Dark Thread Cutting Oil

Section 9 – Physical And Chemical Properties

Physical Appearance:.....: Black
Odor.....: Mild Petroleum
Physical State.....: Liquid
Water Solubility.....: Insoluble
Specific Gravity.....: .878
VOC.....: 2.5%

Section 10 – Stability And Reactivity

STABILITY:

This product is stable.

CONDITIONS TO AVOID:

Avoid contact with incompatible materials and exposure to extreme temperatures.

INCOMPATIBLE MATERIALS:

This product is incompatible with strong oxidizing agents.

DECOMPOSITION PRODUCTS MAY INCLUDE:

Thermal decomposition products are dependent on combustion conditions. A complex mixture of airborne solid, liquid, particulates and gasses may evolve when the material burns. Combustion by-products may include:

oxides of carbon

oxides of sulfur

incompletely burned hydrocarbons as fumes and smoke

POSSIBILITY OF HAZARDOUS REACTIONS:

This product is not expected to polymerize

Product Name.....: RIDGID Dark Thread Cutting Oil

Section 11 – Toxicological Information

ACUTE:

Oral LD₅₀: Not determined

Inhalation LC₅₀: Not determined

CHRONIC: No further toxicological data known.

SENSITIZATION: No further toxicological data known.

REPRODUCTIVE EFFECTS: No further toxicological data known.

TERATOGENIC EFFECTS: No further toxicological data known.

MUTAGENICITY: No further toxicological data known.

SYNERGISTIC MATERIALS: No further toxicological data known.

CARCINOGENICITY: This product is not listed as a known or suspected carcinogen by IARC, OSHA or the NTP.

Section 12 – Ecological Information

ECOTOXICOLOGICAL INFORMATION:

This product has not been evaluated for ecotoxicity. As with any industrial chemical, exposure to the environment should be prevented and minimized wherever possible.

ENVIRONMENTAL FATE:

The degree of biodegradability and persistence of this product has not been determined.

VOC CONTENT:

2.5%

Product Name.....: RIDGID Dark Thread Cutting Oil

Section 13 – Disposal Consideration

WASTE DISPOSAL:

Ensure that collection, transport, treatment and disposal of waste product and containers complies with all applicable laws and regulations. Note that use, mixture, processing or contamination of the product may cause the material to be classified as a hazardous waste. It is the responsibility of the product user or owner to determine at the time of disposal whether the product is regulated as a hazardous waste.

Section 14 – Transportation Information

U.S. DOT HAZARDOUS MATERIAL INFORMATION:

Not DOT regulated.

CANADA TRANSPORT OF DANGEROUS GOODS:

This material is not TDG regulated.

Section 15 – Regulatory Information

FEDERAL REGULATIONS:

SARA 313:

This product contains NONE of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CLEAN WATER ACT:

This product contains mineral oil and is subject to regulation by Section 311 of the Clean Water Act and the Oil Pollution Act. Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.

Product Name.....: RIDGID Dark Thread Cutting Oil

CERCLA REPORTABLE QUANTITY:

Any components listed below have been assigned a reportable quantity (RQ) by the Federal EPA. Releases of the product into the environment that exceed the RQ for a particular component must be reported to the National Response Center at 1-800-424-8802.

None to report

TOXIC SUBSTANCE CONTROL ACT:

The components of this product are listed on the TSCA Inventory.

OZONE DEPLETING SUBSTANCES:

This product contains no ozone depleting substances as defined by the Clean Air Act.

HAZARDOUS AIR POLLUTANTS:

Any components listed below are defined by the Federal EPA as hazardous air pollutants:

None to report

STATE REGULATIONS

This product contains mineral oil, and as used, may be regulated by state used oil regulations. Check with the appropriate state agency to determine whether such a regulation exists.

CANADA

WHMIS Classification: Not controlled under WHMIS

DSL:

The components of this product are listed on DSL Inventory.

Product Name.....: RIDGID Dark Thread Cutting Oil

Section 16 – Other Information

Prepared by: Ridge Tool Company

Issue Date: October 7, 2011

Last Revision Date: October 12, 2009

RIDGE TOOL BELIEVES THE STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE RELIABLE BUT THEY ARE GIVEN WITHOUT WARRANTY OR GUARANTEE OF ANY KIND, EXPRESSED OR IMPLIED, AND WE ASSUME NO RESPONSIBILITY FOR ANY LOSS, DAMAGE OR EXPENSE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THEIR USE.

1. PRODUCT and COMPANY INFORMATION

PRODUCT	DUCT SEAL	EMERGENCY TELEPHONE NUMBER	CHEMTREC: 800-424-9300
CATALOG NUMBERS	DX-1, DX-5, DX-5S	TELEPHONE NUMBER FOR INFORMATION	901-252-5000 ext. 8324
MANUFACTURER / SUPPLIER	THOMAS & BETTS CORPORATION	DATE OF REPARATION or REVISION	July 4, 2012
ADDRESS	8155 T & B BOULEVARD, MEMPHIS, TENNESSEE 38125		

2. COMPOSITION / INFORMATION ON INGREDIENTS

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

Composition comments: The primary component(s) utilized in manufacturing of this product are inert inorganic minerals, water surfactants, and polyisobutylene. These materials are believed to be non-hazardous and are listed under TSCA regulations.

3. HAZARDS IDENTIFICATION

Physical state Solid.

Appearance Thumbable solid

Emergency overview Low hazard for usual industrial or commercial handling by trained personnel.

OSHA regulatory status This product is not hazardous according to OSHA 29CFR 1910.1200.

Potential health effects

Eyes Health injuries are not known or expected under normal use.

Skin Health injuries are not known or expected under normal use.

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Ingestion Not likely, but if ingested, could cause constipation or create a blockage.

Potential environmental effects Not expected to be harmful to aquatic organisms.

4. FIRST AID MEASURES

First aid procedures

Eye contact Do not remove. Seek medical attention.

Skin contact Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Inhalation If symptomatic, move to fresh air. Get medical attention if symptoms persist.

Ingestion Not likely, due to the form of the product.

Notes to physician Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammable properties The product is non-combustible.

Extinguishing media

Suitable extinguishing media

Water. Foam. Carbon dioxide (CO2). Dry chemical. Use fire-extinguishing media appropriate for surrounding materials.

Fire fighting equipment/instructions

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Nitrogen oxides and carbon monoxide may be evolved.

Hazardous combustion products

Carbon dioxide, carbon monoxide, smoke and oxide of any metals that are reported in Section 3 Composition/Information on ingredients.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Wear appropriate personal protective equipment (See Section 8).

Environmental precautions No special environmental precautions required.

Methods for cleaning up Not applicable.

7. HANDLING and STORAGE

Handling Wear protective clothing as described in Section 8 of this safety data sheet. Wash hands after handling and before eating. Use only with adequate ventilation.

Storage Store in a cool, dry place. Store away from incompatible materials (See Section 10).

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Occupational exposure limits No exposure limits noted for ingredient(s).

Engineering controls No particular ventilation requirements.

Personal protective equipment

Eye / face protection Wear safety glasses with side shields (or goggles).

Skin protection Wear cotton or other protective gloves. Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection Not normally needed.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL and CHEMICAL PROPERTIES

Appearance Thumbable solid

Physical state Solid.

Form Solid.

Color Dark gray.

Odor Odorless.

Odor threshold Not available.

pH Not available.

Vapor pressure Not Applicable.

Vapor density Not available.

Boiling point Not available.

Melting point/Freezing point Not available.

Solubility (water) Negligible (20 °C/68 °F)

Specific gravity 1.65 (water = 1)

Flash point 1094 °F (590 °C) Closed Cup

Flammability limits in air, upper, % by volume Not available.

Flammability limits in air, lower, % by volume Not available.

Auto-ignition temperature Not available.

VOC 17 grams/Liter

Percent volatile 2 %

10. STABILITY and REACTIVITY

Chemical stability Material is stable under normal conditions.

Conditions to avoid None known.

Incompatible materials Strong oxidizers, strong acids, and strong bases.

Hazardous decomposition products Toxic gases/vapors. Carbon dioxide. Carbon monoxide.

Possibility of hazardous reactions Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Sensitization No sensitizing effects known.

Acute effects Under normal conditions of intended use, this material does not pose a risk to health.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicity Not expected to be harmful to aquatic organisms.

Persistence and degradability Not available.

Bioaccumulation /Accumulation Not available.

Mobility in environmental media No data available.

13. DISPOSAL CONSIDERATION

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations.

When this product as supplied is to be discarded as waste, it does not meet the definition of a RCRA waste under 40 CFR 261.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION**DOT**

Not regulated as a hazardous material by DOT.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

TDG

Not regulated as dangerous goods.

15. REGULATORY INFORMATION**US federal regulations** This product is not hazardous according to OSHA 29CFR 1910.1200.**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)** Not regulated.**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List** Not regulated.**CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)** None**Superfund Amendments and Reauthorization Act of 1986 (SARA)****Hazard categories**

Immediate Hazard - No

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CFR 355, Appendix A) No**Section 311/312 (40 CFR 370)** No**Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)** Not controlled**Canadian regulations** This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.**WHMIS status** Non-controlled**Inventory status****Country(s) or region****Inventory name****On inventory (yes/no)***

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippine	Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

State regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance** Not listed.**US - Massachusetts RTK - Substance List** Not regulated.**US - New Jersey Worker and Community Right-to-Know Act** Not regulated.**US - Pennsylvania RTK - Hazardous Substances** Not regulated.**Mexico regulations** This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2000).

16. OTHER INFORMATION

HAZARD RATING SYSTEM:

	HMIS	NFPA	KEY
HEALTH	0	0	4 = SEVERE
FLAMMABILITY	1	1	3 = SERIOUS
REACTIVITY	-	--	2 = MODERATE
PHYSICAL HAZARD	0	0	1 = SLIGHT
INSTABILITY			0 = MINIMAL

REVISION SUMMARY **4**SUPERCEDES ISSUE DATE **APRIL 28, 2009**



Material Safety Data Sheet

20-JUNE-2012

SpecSeal® Firestop Putty

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

PRODUCT NAME.....SpecSeal® Firestop Putty
CHEMICAL FAMILY.....Mixture

Company Identification

MANUFACTURER/DISTRIBUTOR

Specified Technologies Inc.
210 Evans Way
Somerville, NJ 08876

PHONE NUMBERS

Product Information : 1-908-526-8000
Emergency : 1-800-255-3924

COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT NAME	CAS NUMBER
Proprietary mixture	
Polybutene	9003-29-6
Aluminum Trihydrate	21645-51-2
Graphite	7782-42-5

HAZARDS IDENTIFICATION

*****EMERGENCY OVERVIEW*****
* Possible skin and eye irritant. Red solid. *

Potential Health Effects:

EYE: Contact may cause irritation and redness.

SKIN: Contact may cause irritation and redness.

INGESTION: Relatively non-toxic.

INHALATION: Irritation of the nose, throat, and lungs may result from over-exposure to vapors or mist from heated material.

CHRONIC (CANCER) INFORMATION: Not classified as carcinogenic.

LONG TERM TOXIC EFFECTS: None known.

FIRST AID MEASURES

First Aid

INHALATION: Remove to fresh air.

SKIN CONTACT: Wash thoroughly.

EYE CONTACT: Irrigate eyes with running water for at least 15 minutes. Get medical attention if irritation develops.

INGESTION: None applicable.

FIRE FIGHTING MEASURES

FLASH POINT >163 deg. C based on most volatile component.

EXTINGUISHING MEDIA..... Dry Chemical; Carbon Dioxide; Foam; Water spray for large fires.

SPECIAL FIRE FIGHTING PROCEDURES:..... As for surrounding fire.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

HANDLING AND STORAGE

Store under ambient conditions. No special handling required.

EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION REQUIREMENTS:..... Safety glasses/goggles.

SKIN PROTECTION REQUIREMENTS: Gloves.

RESPIRATOR REQUIREMENTS: None.

VENTILATION REQUIREMENTS:..... None.

Exposure Guidelines

None.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM Red solid with minimal odor

SPECIFIC GRAVITY 1.49

PERCENT VOLATILES none

SOLUBILITY IN WATER..... Very slight

STABILITY AND REACTIVITY

STABILITY:..... This is a stable material.

CONDITIONS TO AVOID Storage >55 deg. C

HAZARDOUS POLYMERIZATION:..... Will not occur.

INCOMPATIBILITIES:..... None special.

TOXICOLOGICAL INFORMATION

Mixture not tested but based on components:

May be irritating to skin and eyes and may aggravate existing skin and eye conditions. Irritation of the nose, throat, and lungs may result from over-exposure to vapors or mist from heated material.

None of the components are listed as carcinogens.

ECOLOGICAL INFORMATION

No data. Not anticipated to be environmental hazard.

DISPOSAL CONSIDERATIONS

Waste Disposal:

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

TRANSPORTATION INFORMATION

DOT – not regulated.

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status: Article.

Section 313 Supplier Notifications.

This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

OTHER INFORMATION

NPCA-HMIS Rating

Health : 1
Flammability : 0
Reactivity : 0

Personal Protection rating to be supplied by user depending on use conditions.

STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.1% FOR SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR TERATOGENS): NJTSRN-SSP

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: Possible traces of formaldehyde and acrylonitrile.

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: None known.

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the data compiled. However, no representation, warranty, or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information.

Responsibility for MSDS :

Specified Technologies Inc.
210 Evans Way
Somerville, NJ 08876

**MATERIAL SAFETY DATA SHEET****1) PRODUCT AND COMPANY IDENTIFICATION**THE DOW CHEMICAL COMPANY
Midland Michigan 48674
USA

24-Hour Emergency Phone Number: 989-636-4400

Customer Service: 800-366-4740

PRODUCT NAME : GREAT STUFF* Gaps and Cracks

MATERIAL TYPE : One component system

ISSUE DATE : 04/26/2007

REVISION DATE : 01/25/2007

2) COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	%
Prepolymer of MDI and Polyether polyol	mixture	40-70, 60-100%
Polymethylene polyphenyl Isocyanate containing approx. 40-50% MDI (4,4'methylene bisphenyl isocyanate) CAS# 101-68-8	9016-87-9	5-10, 10-30%
Liquified Petroleum Mixture containing Isobutane (CAS#75-28-5), propane (CAS# 74-98-6) and dimethyl ether (CAS# 115-10-6)	mixture	10-30%

3) HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

Sprayed or heated material harmful if inhaled. May cause allergic skin reaction. May cause allergic respiratory reaction and lung injury. Avoid temperatures above 105F (41C). Toxic flammable gases and heat are released under decomposition conditions. Toxic fumes may be released in fire situations. Reacts slowly with water, releasing carbon dioxide, which can cause pressure buildup and rupture of closed containers. Elevated temperatures accelerate this process.

EYE

May cause moderate eye irritation. May cause very slight transient (temporary) corneal injury.

SKIN

Prolonged or repeated exposure may cause slight skin irritation. May cause allergic skin reaction in susceptible individuals. Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization. May stain skin. A single prolonged exposure is not likely to result in the material being absorbed in harmful amounts.

INGESTION

Single dose oral toxicity is considered to be low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

INHALATION

At room temperature, vapors are minimal due to low vapor pressure. However, certain operations may generate vapor or aerosol concentrations sufficient to cause irritation or other adverse effects. Such operations include those in which the material is heated, sprayed or otherwise mechanically dispersed such as drumming, venting or

MATERIAL SAFETY DATA SHEET

pumping. Excessive exposure may cause irritation to upper respiratory tract and lungs, and pulmonary edema (fluid in the lungs). May cause respiratory sensitization in susceptible individuals. MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized. Symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Effects may be delayed. Decreased lung function has been associated with overexposure to isocyanates.

SYSTEMIC EFFECTS

Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

TERATOLOGY

In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only at high doses which were toxic to the mother.

CANCER INFORMATION

Lung tumors have been observed in laboratory animals exposed to aerosol droplets of MDI/Polymeric MDI (6 mg/m³) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

4) FIRST-AID MEASURES

EYE

Irrigate with flowing water immediately and continuously for 15 minutes. Remove contacts after first five minutes and continue washing. Consult medical personnel.

SKIN

Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. An MDI skin decontamination study demonstrated that a polyglycol-based skin cleanser or corn oil may be more effective than soap and water.

INGESTION

If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

NOTE TO PHYSICIAN

No specific antidote. Provide supportive care. Treatment based on judgment of the physician in response to reactions of the patient. May cause respiratory sensitization or asthma-like symptoms. Bronchodilators, expectorants, and antitussives may be of help. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed for 24-48 hours for signs of respiratory distress.

5) FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash point: -156F, -104C

Method: Estimated

HAZARDOUS COMBUSTION PRODUCTS

During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. Hazardous combustion products may include but are not limited to: nitrogen oxides, isocyanates, hydrogen cyanide, carbon monoxide, and carbon dioxide.

MATERIAL SAFETY DATA SHEET

OTHER FLAMMABILITY INFORMATION

Product reacts with water. Reaction may produce heat and/or gases. Reaction may be violent. Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Dense smoke is produced when product burns. Spills of these organic liquids on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

EXTINGUISHING MEDIA

Use carbon dioxide, dry chemical, foam, water fog or fine spray. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effective. Do not use direct water stream which can spread fire.

FIRE FIGHTING INSTRUCTIONS

Keep people away. Isolate fire area and deny unnecessary entry. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Water is not recommended but may be applied in very large quantities as a fine spray when other extinguishing agents are not available. Contain fire water run-off if possible. Do not use direct water stream. May spread fire. Fight fire from protected location or safe distance. Consider use of unmanned hose holder or monitor nozzles. Use water spray to cool fire exposed containers and fire affected zone until fire is out. Immediately withdraw all personnel from area in case of rising sound from venting safety devices or discoloration of the containers. Move containers from fire area if this is possible without hazard.

PROTECTIVE EQUIPMENT - FIRE FIGHTERS

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant clothing with SCBA. If this will not provide sufficient fire protection; consider fighting fire from a remote location.

6) ACCIDENTAL RELEASE MEASURES

PROTECT PEOPLE

Avoid any contact. Barricade area. Clear non-emergency personnel from area. Keep upwind of spill. Ventilate area of leak or spill. The area must be evacuated and reentered by persons equipped for decontamination. Use appropriate safety equipment. If available, use foam to suppress vapors.

PROTECT THE ENVIRONMENT

Contain liquid to prevent contamination of soil, surface water or ground water. Keep out of ditches, sewers, and water supplies. Should the product enter sewers or drains, it should be pumped into a covered, vented container; the cover should be placed loosely on the container but not made pressure tight. Move to a well-ventilated area. Emergency services may need to be called to assist in the cleanup operation.

CLEAN-UP

Supplies of suitable decontaminant should always be kept available. Absorb with material such as: sawdust, vermiculite, dirt, sand, clay, cob grit, Milsorb. Avoid materials such as cement powder. Collect material in suitable and properly labeled OPEN containers. Do not place in sealed container. Prolonged contact with water results in a chemical reaction which may result in rupture of the container. Place in: polylined fiber pacs, plastic drums, or properly labeled metal containers. Remove to a well ventilated area. Clean up floor areas. Attempt to neutralize by suitable decontaminant solution: Formulation 1: sodium carbonate 5-10%; liquid detergent 0.2-2%; water to make up to 100%. OR Formulation 2: Concentrated ammonia solution 3-8%; liquid detergent 0.2-2%; water to make up to 100%. If ammonia is used, use good ventilation to prevent vapor exposure. If you have any questions on how to neutralize call The Dow Chemical

MATERIAL SAFETY DATA SHEET

Company.

7) HANDLING AND STORAGE

HANDLING

Avoid contact of this product with water at all times during handling and storage. Use only with adequate ventilation. Keep equipment clean. Use disposable containers and tools where possible. Do not eat, drink, or smoke in working area.

STORAGE

Store in a dry place. The recommended storage temperature is between 32 - 90F (0-32C). Keep containers tightly closed when not in use. Protect containers from physical abuse. Avoid direct sunlight. DO NOT incinerate aerosol can.

8) EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS

Use only with adequate ventilation. Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Exhaust systems should be designed to move the air away from the source of vapor/aerosol generation and the people working at this point. Odor is inadequate warning of excessive exposure.

EYE/FACE PROTECTION

Use chemical goggles.

SKIN PROTECTION

Use protective clothing impervious to this material. Selection of specific items such as faceshield, gloves, boots, apron, or full-body suit will depend on operation. Consideration of all chemicals involved, time and the dexterity needed to safely complete the job must be considered. Solvents can significantly change the permeation of a chemical through a barrier. Work with your safety equipment supplier to obtain the best Personal Protective Equipment for the job. Nitrile gloves are often found to be appropriate for work with MDI. Butyl rubber, PVC and neoprene are also often chosen.

Remove contaminated clothing immediately, wash skin area with soap and water (warm water if available) and launder clothing before reuse. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and destroyed.

RESPIRATORY PROTECTION

Atmospheric levels should be maintained below the exposure guideline. When atmospheric levels may exceed the exposure guideline, use an approved air-purifying respirator equipped with an organic vapor sorbent and a particle filter. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure air-supplying respirator (airline or self-contained breathing apparatus). For emergency response or for situations where the atmospheric level is unknown, use an approved positive-pressure self-contained breathing apparatus.

EXPOSURE GUIDELINES(S)

Methylene bisphenyl isocyanate (MDI): ACGIH TLV is 0.005 ppm TWA and OSHA PEL is 0.02 ppm Ceiling. PELs are in accord with those recommended by OSHA, as in the 1989 revision of PELs.

Isobutane: ACGIH TLV and OSHA PEL are 800 ppm.

Propane: ACGIH TLV is 2500 ppm TWA and OSHA PEL is 1000 ppm.

Dimethyl ether: ACGIH TLV is 1000 ppm TWA.

9) PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE

MATERIAL SAFETY DATA SHEET

liquid

VAPOR PRESSURE

4210 mm Hg at 21C/70F

SPECIFIC GRAVITY

1.1

10) STABILITY AND REACTIVITY

CHEMICAL STABILITY

Stable under recommended storage conditions.

CONDITIONS TO AVOID

Avoid temperatures above 120F, 49C. Avoid temperatures below 32F, 0C. Can react with itself at temperatures above 320F, 160C. Product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid. Avoid moisture. Material reacts slowly with water, releasing carbon dioxide, which can cause pressure buildup and rupture of closed containers. Elevated temperatures accelerate this reaction.

INCOMPATIBILITY WITH OTHER MATERIALS

Avoid contact with acids, water, alcohols, amines, ammonia, bases, moist air, and strong oxidizers. Avoid contact with metals such as aluminum, brass, copper, galvanized metals, tin, zinc. Avoid contact with moist organic absorbents. Reaction with water will generate carbon dioxide and heat. Generation of gas can cause pressure buildup in closed systems. Avoid unintended contact with polyols. The reaction of polyols and isocyanates generate heat. Diisocyanates react with many materials and the rate of reaction increases with temperature as well as increased contact; these reactions can become violent. Contact is increased by stirring or if the other material mixes with the diisocyanate. Diisocyanates are not soluble in water and are denser than water and sink to the bottom, but react slowly at the interface. The reaction forms carbon dioxide gas and a layer of solid polyurea.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition.

HAZARDOUS POLYMERIZATION

Can occur. Polymerization can be catalyzed by: strong bases and water. Can react with itself at temperatures above 320F (160C).

11) TOXICOLOGICAL INFORMATION

SKIN

MDI: The LD50 for skin absorption in rabbits is > 2000 mg/kg.

INGESTION

MDI: The oral LD50 for rats is > 10,000 mg/kg.

MUTAGENICITY

MDI: Mutagenicity data on MDI are inconclusive. MDI was weakly positive in some in-vitro (test tube) studies;

other in-vitro studies were negative. A mutagenicity study in animals was negative.

Dimethyl ether: In vitro mutagenicity studies were positive. Animal mutagenicity studies were negative in some cases and positive in others.

12) ECOLOGICAL INFORMATION

MOVEMENT & PARTITIONING

Based on information for MDI and polymeric MDI. In the aquatic or terrestrial

MATERIAL SAFETY DATA SHEET

environment, movement is expected to be limited by its reactivity with water forming predominantly insoluble polyureas.

DEGRADATION & PERSISTENCE

Based on information for MDI and polymeric MDI. In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

ECOTOXICITY

Based on information for MDI and polymeric MDI. The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species. Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50 > 100 mg/L in most sensitive species). The LC50 in earthworm *Eisenia foetida* is > 1000 mg/kg.

13) DISPOSAL CONSIDERATIONS

DISPOSAL CONSIDERATIONS

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device.

As a service to its customers, Dow can provide names of information resource to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customer Information Center at 800-258-2436 or 989-832-1556 for further details.

DISPOSAL

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

14) TRANSPORT INFORMATION

US D.O.T.

Consumer Commodity ORM-D

15) REGULATORY INFORMATION

NOTICE

The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, expressed or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

REGULATORY INFORMATION

U.S. REGULATIONS

SARA 313 INFORMATION: This product contains the following subject to the reporting

MATERIAL SAFETY DATA SHEET

requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME CAS NUMBER

Polymeric Diphenylmethane diisocyanate, CAS#9016-87-9
4,4'' Methylene bisphenol isocyanate, CAS# 101-68-8

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

PMDI/MDI: immediate and delayed health hazard

Isobutane/propane: fire hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND):

This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA which may require reporting of releases:

Category:

Chemical Name CAS# RQ

Methylene bisphenyl isocyanate	101-68-8	5000 lbs
Isobutane	75-28-5	100 lbs
Propane	74-98-6	100 lbs
Dimethyl ether	115-10-6	100 lbs

CALIFORNIA PROPOSITION 65

This product contains no listed substances known to the state of California to cause cancer, birth defects or other reproductive harm.

PENNSYLVANIA STATE RIGHT TO KNOW HAZARDOUS SUBSTANCE:

Methylene bisphenyl isocyanate	101-68-8
Isobutane	75-28-5
Propane	74-98-6
Dimethyl ether	115-10-6

CANADIAN REGULATIONS

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WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

D2A - respiratory tract sensitizer

D2B - eye or skin irritant, skin sensitizer

B3 - combustible liquid

Refer elsewhere in the MSDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

- - - - -
CPR STATEMENT: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

- - - - -
HAZARDOUS PRODUCTS ACT INFORMATION: This product contains the following ingredients which are Controlled Products and/or on the Ingredient Disclosure List (Canadian HPA section 13 and 14):

COMPONENTS: CAS #

4,4'' Methylene bisphenol isocyanate CAS# 101-68-8 2-15 wt %

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA):

All substances in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

16) OTHER INFORMATION

OTHER INFORMATION

VOC content: 158.1 grams/liter

No other information.

(TM), *, or (R) Indicates a trademark of The Dow Chemical Company.



ZEP Manufacturing Company
 Acuity Specialty Products Group, Inc.
 P.O. Box 2015
 Atlanta, GA 30301
 1-877-I-BUY-ZEP (428-9937)
 www.zep.com

Material Safety Data Sheet and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name REACH
Product Use Liquid Hand Cleaner
Product Code 0925
Date of issue 04/14/03 **Supersedes** 11/13/95

Emergency Telephone Numbers For MSDS Information:
 Acuity Specialty Products Group, Inc.
 Compliance Services 1-877-I-BUY-ZEP (428-9937)

For Medical Emergency
 INFOTRAC:
 (877) 541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency
 CHEMTREC:
 (800) 424-9300 - All Calls Recorded
 In the District of Columbia (202) 483-7616

Printing date: 01/20/05

Prepared by Compliance Services Group
 Acuity Specialty Products Group
 1420 Seaboard Industrial Blvd.
 Atlanta, GA 30318

Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
HYDROTREATED LIGHT PETROLEUM DISTILLATES; paraffinic, naphthenic solvent	64742-47-8	30-40	Supplier Suggested (United States). PEL: 100 ppm

Section 3. Hazards Identification

Acute Effects **Routes of Entry** Ingestion.

Skin Non-sensitizer for skin.

Eyes Slightly hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

Inhalation Inhalation not likely under normal use conditions. Can cause dizziness, lightheadedness, headache, nausea, and blurred vision.

Ingestion No data on acute toxicity of the product when ingested.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse health effects are lessened by following all prescribed safety precautions, including use of proper personal protective equipment.

HMIS

Health	0
Fire Hazard	0
Reactivity	0
Personal Protection	N/A

Carcinogenic Effects Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Chronic Effects Prolonged or repeated contact may dry skin and cause irritation.

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

Skin Contact Rinse with plenty of running water. Get medical attention if irritation develops.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point Not determined.

Flammable Limits Not determined.

Flammability Gel structure inhibits combustibility of solvent.

Fire Hazard None.

Fire-Fighting Procedures None.



Section 6. Accidental Release Measures

Spill Clean up Absorb with an inert material and put the spilled material in an appropriate waste disposal. To clean the floor and all objects contaminated by this material, use detergent. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Section 7. Handling and Storage

Handling Avoid contact with eyes.

Storage Keep container tightly closed. Keep container in a cool, well-ventilated area. Store between 40°F - 120°F.

Section 8. Exposure Controls, Personal Protection**Personal Protection****Protective Clothing (Pictograms)**

Eyes No special protection is required.

Body No special protective clothing is required.

Respiratory No special protection is required.

Section 9. Physical and Chemical Properties

Physical State Liquid. (Gel)

Color Green.

pH 8

Odor Almond-like.

Boiling Point Not determined.

Vapor Pressure Not determined.

Specific Gravity 0.95 (Water = 1)

Vapor Density Not determined.

Solubility Emulsifies in water.

Evaporation Rate Not determined.
VOC (Consumer) 0 (g/l).

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Incompatibility Reactive with oxidizing agents.

Hazardous Polymerization Will not occur.

Hazardous Decomposition Products When heated to decomposition it emits toxic fumes.

Section 11. Toxicological Information

Toxicity to Animals **Hydrotreated Light Petroleum Distillates:**
DERMAL (LD50): Acute: 3000 mg/kg [Rabbit].

Section 12. Ecological Information

Ecotoxicity Not available.

Biodegradable/OECD Not available.

Section 13. Disposal Considerations

Waste Information Waste must be disposed of in accordance with federal, state and local environmental control regulations. **Waste Stream** Code: - (None.)
Classification: - (Non-hazardous waste)

Consult your local or regional authorities.

Section 14. Transport Information

Proper shipping name Not applicable.

DOT Classification Not a DOT controlled material (United States).

UN number Not regulated.

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment.

Section 15. Regulatory Information

U.S. Federal Regulations SARA 313 toxic chemical notification and release reporting:
No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean air act (CAA) 112 regulated toxic substances: No products were found.
All Components of this product are listed or exempt from listing on TSCA inventory.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Material Safety Data Sheet



HEALTH
FLAMMABILITY

HMIS®

1 **REACTIVITY** **0**
1 **PERSONAL PROTECTION** **None**

Identity: KLEIN KLEANERS®
Formula: B422
Part numbers: 51425, 51426

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

SECTION 1: Company Identification

Manufacturer's Name ITW Dymon	Emergency Telephone Number 1-800-535-5053
Address (Number, Street, City, State, and ZIP Code) 805 East Old 56 Highway	International Emergency Telephone Number 1-352-323-3500
Olathe, Kansas 66061	Telephone Number for Information 1-913-397-9889
	Signature of Preparer (Optional) Regulatory Dept.

SECTION 2: Ingredients/Identity Information

Components (Chemical Identity, Common Name(s))	CAS No.	OSHA PEL	ACGIH-TLV	Other Limits Recommended	% (Opt.)
Water	7732-18-5	None	None	None	60 - 100%
D-Limonene (R-p-mentha-1,8-diene)	5989-27-5	None	None	30 ppm (Manu.)	5 - 13%
Ethoxylated Alcohols (C12-15 pareth-7)	68131-39-5	None	None	None	1 - 5%
Sodium Lauryl Sulfate	151-21-3	None	None	None	1 - 5%
Fragrance	Mixture	None	None	None	1 - 5%

In accordance with 29 CFR 1910.1200 this product does not contain any substances defined as hazardous by this standard.

Any substance listed as hazardous by the States of California, Florida, Illinois, Michigan, New Jersey, Ohio, Pennsylvania or Texas is described above if known present in regulated concentrations.

SECTION 3: Hazards Identification

Route(s) of Entry	Eyes?	Inhalation?	Skin?	Ingestion?
	Yes	No	Yes	Yes

Acute Health Hazards - Caution. May cause mild eye or skin irritation.

Chronic Health Hazards - None known

Carcinogenicity:

Chemical: None	OSHA: No	NTP: No	IARC: No
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Signs and Symptoms of Exposure - Redness, tearing or burning in eyes. Redness, burning, drying or cracking of skin. Irritation of the throat or stomach, nausea, vomiting, and diarrhea if swallowed.

Medical Conditions Generally Aggravated by Exposure - Pre-existing skin conditions such as dermatitis may be adversely affected by this and other oil and grease effective cleaners.

SECTION 4: Emergency and First Aid Procedures:

Eyes - Flush with plenty of water for at least 15 minutes lifting eyelids to insure complete removal. See a physician immediately.

Ingestion - Not a likely exposure route. If a large quantity of liquid is swallowed, do not induce vomiting, call a physician or poison control center immediately.

Inhalation - Unlikely route as liquid is impregnated on a towel, minimizing exposure via this route. If overexposed move into fresh air. If symptoms develop seek medical attention.

Skin - None usually required. Material is designed for skin cleansing. If symptoms develop seek medical attention.

SECTION 5: Fire Fighting Measures

Flash Point (Method Used) None to boiling (PMCC) Solution on Towel	Flammable Limits No Data	LEL No Data	UEL No Data
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Extinguishing Media – Use carbon dioxide, dry chemical, foam, fog or water spray.

Special Fire Fighting Procedures - Keep containers cool and vapors down with water spray. Prevent runoff from entering sewers and public waterways. Wear SCBA in chemical fires.

Hazardous Products of Combustion-Carbon dioxide, carbon monoxide, various hydrocarbons, hydrogen sulfide, sulfur dioxide, and soot.

Unusual Fire and Explosion Hazards - None known.

SECTION 6: Accidental Release Measures

Small Spill - Wipe up small releases with a dry absorbent cloth or other absorbent material.

Large Spill – Absorb liquid with vermiculite, absorbent cloth, or other absorbent material. Prevent material from entering sewers or drains. Ventilate area and block traffic. Transfer contaminated material into suitable container for proper disposal.

SECTION 7: Handling and Storage

Handling - Do not allow towel contact with eyes. For external use only. Not for use around the mouth or eyes for an extended period of time. Do not smoke while using. Do not contaminate water, food or feed by use or storage. Follow label directions carefully.

Storage – Store in a cool well ventilated area. Keep away from heat sources. Keep out of reach of children. Keep container tightly sealed when not in use.

SECTION 8: Exposure Controls / Personal Protection

Eye Protection – None necessary. Do not allow towel to directly contact eyes.

Skin Protection – None necessary. Product is designed for direct skin use.

Respiratory Protections – Not usually necessary. Use with adequate ventilation. Use NIOSH/MSHA approved respirator if PELs or TLVs are exceeded.

Engineering Controls – Ventilation not usually necessary but should be provided in the event of overexposure.

SECTION 9: Physical and Chemical Properties

Appearance and Odor:	Opaque white liquid with a fresh citrus scent saturated onto towels.
PH	9.8 ± 0.5
Specific Gravity (70°F)	0.986
Boiling Point:	212°F
Melting Point:	No Data
Evaporation Rate (Butyl Acetate = 1)	No Data
Vapor Pressure (mm-Hg @ 70°F)	No Data
Vapor Density (AIR = 1)	> 1
Solubility in Water	Dispersible
Volatile Organic Compounds (VOCs)	78.97 grams per liter or 8.0% by weight VOCs

SECTION 10: Stability and Reactivity

Hazardous Polymerization – This product will not undergo hazardous polymerization.

Hazardous Decomposition or Byproducts – Carbon dioxide, carbon monoxide, hydrogen sulfide, sulfur dioxide, and soot.

Chemical Stability - Stable

Incompatibility (Materials to Avoid) - Strong oxidizers and acids.

SECTION 11: Toxicological Information

D'Limonene: Acute Dermal LD50 >5g/kg, rabbit
Acute Oral LD50 >5g/kg, rat

Ethoxylated Alcohols: Acute Dermal LD50 2g/kg, rabbit
Acute Oral LD50 2.5-5g/kg, rat

SECTION 12: Ecological Information

Ethoxylated Alcohols: 96 hr fathead minnow static acute LC50: 0.5 mg/L
48 hr Daphnia pulex static acute EC50: 0.76 mg/L

SECTION 13: Disposal Consideration

Disposal Method - Dispose of in accordance with all applicable local, state, and federal regulations.

RCRA Waste Information – If this product becomes a waste, it would not be a hazardous waste as defined by RCRA (40 CFR 261). However the waste should be properly characterized to evaluate whether its composition has been modified prior to disposal.

SECTION 14: Transport Information

DOT Information – 49 CFR 172.101

Proper Shipping Description: Not Regulated

Hazard Class: None

Identification Number: None

Packing Group: None

Water Transportation:

Proper Shipping Description: Not Regulated

Hazard Class: None

Identification Number: None

Packing Group: None

Air Transportation:

Proper Shipping Description: Not Regulated

Hazard Class: None

Identification Number: None

Packing Group: None

Marine Pollutants: None

SECTION 15: Regulatory Information

US Federal Regulations:

TSCA (Toxic Substances Control Act) Status

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

CERCLA RQ – 40 CFR 302.4 (a)

None Listed

SARA 313 Components – 40 CFR 372.65

None

State and Local Regulations:

California Proposition 65

None

NSF Registration Category Code – E4

Section 16: Additional Information

Date Prepared:

Rev. 3 – 11/21/06 – NSF Category Code added.

Rev. 2 – 09/05/06

Rev. 1 – 08/19/05

WARNING! The use of this product is beyond the control of the manufacturer; therefore, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The user must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials. The manufacturer warrants only that this product meets the manufacturer's specifications for such product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, PRODUCTIVENESS, OR ANY OTHER MATTER, OF THIS PRODUCT. THE MANUFACTURER SHALL BE IN NO WAY RESPONSIBLE FOR THE IMPROPER USE OF THIS PRODUCT. The sole and exclusive remedy against the manufacturer for breach of warranty shall be reimbursement of the purchase price of the product in the event that a defective condition of the product shall be found to exist. NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE.

CHURCH & DWIGHT CO., INC.

CONSUMER PRODUCTS • SPECIALTY PRODUCTS



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1. PRODUCTS AND COMPANY IDENTIFICATION

Product Name

HOUSEHOLD AMMONIA

PARSONS' (Clear, Lemon, Pine and Sudsy)

BO PEEP (Clear, Lemon, Sparkling, and Sudsy/Cloudy)

Product Use: Liquid cleaner

Chemical Name: Mixture

Chemical Formula: Mixture

Synonyms/Common Names: Ammonia Cleaner

COMPANY INFORMATION

Church & Dwight Co., Inc.
469 N. Harrison Street
Princeton, NJ 08540

Emergency Phone:
1-800-424-9300

Medical Emergency Phone:
1-888-234-1828

Customer Information Phone:
1-800-926-5222

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Clear, cloudy-white or colored liquid with a distinct ammonia odor.
May cause skin irritation or dermatitis.
May cause immediate severe pain, closure of eyelids, and corneal injury.
Inhalation of ammonia vapors may cause respiratory irritation and pulmonary edema.
Ingestion may cause pain and burns of the mucous membranes, esophagus and stomach.

This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission (CPSC). The use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. The requirements of the Occupational Safety and Health Administration applicable to this MSDS differ from the labeling requirements of the CPSC and, as a result, this MSDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

HMIS Rating	
Health	3
Fire	1
Reactivity	0

POTENTIAL HEALTH EFFECTS

EYE: May cause severe eye irritation with pain, closure of eyelids, and possible corneal injury.



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SKIN CONTACT: May cause various severities of irritation and dermatitis upon prolonged, repeated or occluded contact.

INGESTION: May cause pain and burns to mucous membranes, the esophagus and stomach, with vomiting and diarrhea.

INHALATION: Mild inhalation of ammonia vapors may cause irritation of the nose and throat with coughing and sneezing. More severe exposures may cause respiratory irritation, olfactory fatigue, labored breathing, and pulmonary edema.

SUBCHRONIC EFFECTS/CARCINOGENICITY: None known. Not listed as carcinogenic by IARC, NTP, OSHA, ACGIH or NIOSH.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENTS</u>	<u>% by Wt.</u>	<u>CAS Number</u>	<u>OSHA TWA</u>	<u>ACGIH TWA</u>	<u>ACGIH & OSHA STELs</u>
Ammonium Hydroxide (as NH ₃)	< 3%	1336-21-6	50 ppm	25 ppm	35 ppm

4. FIRST AID MEASURES

SKIN: Immediately remove contaminated clothing and shoes. Rinse affected area with mild soap and large amounts of water until no evidence of product remains. Get medical attention if irritation persists. Wash clothing before reusing.

EYES: Immediately rinse eyes with plenty of clean, flowing water, occasionally lifting upper and lower eyelids. Flush for at least 15 minutes. Get immediate medical attention.

INHALATION: Immediately move affected person from area of exposure to fresh air. Treat symptomatically and supportively. Get medical attention or contact a local poison control center. If breathing has stopped, give artificial respiration and get immediate medical attention.

INGESTION: Immediately seek medical attention. Maintain airway and respiration. Do not induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration. Dilution by rinsing the mouth and giving water or milk to drink is generally recommended. **Do not attempt to give anything orally to an unconscious person.** Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASHPOINT: >210°F

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water spray, or regular foam.

FLAMMABLE LIMITS:

LFL: Not Determined

UFL: Not Determined



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FIRE-FIGHTING INSTRUCTIONS: Move containers from area if you can do so without risk. Keep upwind and avoid breathing vapors. Use extinguishing agents suitable for surrounding fire. Do not scatter spilled material with high-pressure water streams. Dike fire-control water for later disposal. Wear proper full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA) with full face piece operated in positive pressure mode.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Negligible fire hazard when exposed to heat or flame. However, if ammonia gas is evolved, it is flammable.

6. ACCIDENTAL RELEASE MEASURES

Stop spill or leak if you can do so without risk. Ventilate area and keep upwind of spill. Close off area to traffic. For small spills, take up with sand or other absorbent material and place into clean, dry containers. For large spills, dike far ahead of spill to contain for later disposal. Cover collection containers and remove from area for disposal as regulations permit (See Section 12).

7. HANDLING AND STORAGE

Store away from incompatible materials and excessive heat (See Section 10). Do not mix with other household or industrial chemicals such as bleach, toilet bowl cleaners, wall or tile cleaners.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Provide local exhaust ventilation system to meet established exposure limits where ammonia vapors are likely to approach or exceed exposure limits.

RESPIRATORY PROTECTION: Air contamination monitoring should be conducted where fumes or vapors may be released or generated. If respiratory protection is required, wear a NIOSH/MSHA approved respirator appropriate for the type of contaminants and the contamination levels found in the workplace.

GLOVES: Wear chemical-resistant gloves where prolonged or repeated skin contact may occur.

EYE PROTECTION: Splash-proof safety goggles should be worn where eye contact is likely to occur.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear impervious protective clothing where splashing and repeated or prolonged contact may occur. Eyewash facility recommended in work area or in close proximity.

PROTECTIVE WORK/HYGIENIC PRACTICES: No special requirements with respect to chemical workplace exposure beyond those noted above. Specific requirements with respect to equipment and applications are the responsibility of the handler/user.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, cloudy-white or colored liquid.

ODOR: Ammonia

PHYSICAL STATE: Liquid

SPECIFIC GRAVITY: 0.9881-0.9997 @ 25°C.

PH: 11.2 - 11.5



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SOLUBILITY IN WATER: Complete
VAPOR PRESSURE: Not determined
% VOLATILES: > 99%

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under normal temperatures and pressures.

CONDITIONS TO AVOID: Contact with incompatible materials.

INCOMPATIBILITY WITH OTHER MATERIALS: Chlorine, hypochlorite, acids, and metals.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce corrosive vapors of ammonia and toxic oxides of nitrogen.

HAZARDOUS POLYMERIZATION: Has not been reported to occur under normal temperatures and pressures.

11. TOXICOLOGY INFORMATION

The acute health effects described below are those, which could potentially occur for the finished product. They are based on the toxicology information available for the finished product and /or each hazardous ingredient, and are consistent with the product type and the likelihood of a specific route of exposure. Known chronic health effects related to exposure to a specific ingredient are indicated.

EYE EFFECTS: May cause eye irritation with severe pain, closure of eyelids, and corneal injury.

SKIN EFFECTS: Repeated, prolonged or occluded contact may cause various severities of skin irritation.

ACUTE ORAL EFFECTS: May cause pain and burns to mucous membranes, the esophagus and stomach, with vomiting and diarrhea.

INHALATION EFFECTS: Ammonia vapors may cause upper respiratory irritation with coughing and sneezing, olfactory fatigue, labored breathing, and pulmonary edema.

CHRONIC EFFECTS: None known for the product.

12. ECOTOXICOLOGY INFORMATION

TOXICITY: This product is acutely toxic to aquatic life.

PERSISTENCE: This product is not expected to persist in the environment.

BIOACCUMULATION: This product is not expected to bioaccumulate.

Ammonia has been found to be acutely toxic, to numerous aquatic species, at low exposure concentrations (~ 1 mg/L). Chronic exposure to lower concentrations may impact the growth and reproduction of aquatic plants and animals. Aquatic toxicity is largely dependent upon pH, which dictates the amount of undissociated NH₃.

13. DISPOSAL CONSIDERATIONS

Dispose of waste product in accordance with all local, state and federal environmental regulations. State and local regulations may differ from federal. Be sure to consult with appropriate agencies for specific rules.



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14. TRANSPORTATION INFORMATION

D.O.T. SHIPPING NAME: Not regulated. See product name.

D.O.T./E.P.A. HAZARD CLASS: Not applicable

U.N./N.A. NUMBER: Not applicable

HAZARDOUS SUBSTANCE/RQ: Not applicable

D.O.T. LABEL: Not applicable

D.O.T. PLACARD: Not applicable

15. REGULATORY INFORMATION

The ingredients in this product are reported in the U.S. EPA TSCA Inventory List or are exempted or excluded from listing.

CERCLA (40 CFR 302.4): Ammonium Hydroxide, RQ 1000 lbs.

SARA TITLE III

Section 313: Toxic chemical - None at levels subject to reporting.

16. OTHER INFORMATION

SUPERSEDES DATE: 09/18/02

REASON FOR REVISION: Contact emergency information updated.

For additional non-emergency health, safety and environmental information telephone 609.279.7705 or write to:

Church & Dwight Co., Inc.
R & D Technical Regulatory Affairs
469 North Harrison Street
Princeton, New Jersey 08543

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MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: Ice-Off® Windshield Spray De-icer
Product Number (s): 05346, 75346

Manufactured By: CRC Industries, Inc. (215) 674-4300
885 Louis Drive, Warminster, PA 18974
24-Hour Emergency Information: CHEMTREC (800) 424-9300

Section 2: Composition/Information on Ingredients

Component	CAS NUMBER	ACGIH TLV	OSHA PEL	OTHER LIMITS	%
Methanol	67-56-1	200 ppm	200 ppm	200 ppm	> 90
Propylene glycol	57-55-6	NE	NE	50 ppm	< 10
Water	7732-18-5	NE	NE	NE	< 10
Carbon Dioxide	124-38-9	5000 ppm	5000 ppm	5000 ppm	< 10

Section 3: Hazards Identification

Emergency Overview

Appearance & Odor: Clear, water-white liquid.

Danger: Flammable. Vapor Harmful. May be fatal or cause blindness if swallowed. Contents Under Pressure.

Potential Health Effects:

Inhalation: Drowsiness, nausea and vomiting.
Eyes: Irritation
Skin: Burning, itching and redness.
Ingestion: Inebriation, headache, nausea, blindness and death.

Carcinogenicity: OSHA: No IARC: No NTP: No
Chronic Overexposure: NA
Medical Conditions Aggravated by Exposure: NA

Section 4: First Aid Measures

Inhalation: Remove to fresh air. Give artificial respiration if necessary.
Eyes: Flush with large amounts of water for 15 minutes.
Skin: Remove contaminated clothing and wash area with soap and water.
Ingestion: Call a physician. Induce vomiting.

Section 5: Fire-Fighting Measures

Flashpoint:	55 °F	Method:	TCC	LEL:	6.0	UEL:	36.5
Extinguishing Media:	Carbon dioxide, dry chemical and foam.						
Hazardous Combustion Products:	Thermal - Carbon monoxide, CO ₂						
Fire-fighting Instructions:	Remove containers from fire area if possible. Use self-contained breathing apparatus for fire fighting. Aerosol cans may explode if heated above 120°F.						
NFPA:	Health:	2	Flammability:	3	Reactivity:	0	
HMIS:	Health:	2	Flammability:	3	Reactivity:	0	PPE: B

Section 6: Accidental Release Measures

Spill/Leak Procedures: Usually not a problem with aerosols. Area should be ventilated. Absorbent should be used to pick up excess material. All used and unused product should be disposed of in accordance with federal, state and local regulations.

Section 7: Handling and Storage

Storage Procedures: Store in a cool, dry area. Aerosol cans must be maintained below 120°F to prevent cans from exploding.

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Adequate to prevent accumulation of vapors. Use mechanical means if necessary to maintain levels below the exposure limits. If working in a confined space, follow applicable OSHA regulations.

Respiratory: Use NIOSH/MSHA compliant respirators or self-contained breathing apparatus above exposure limits. Follow OSHA regulations 29 CFR 1910.134.

Protective Clothing/Equipment: Wear chemically protective gloves and safety glasses. Use a splash apron and boots if splashing occurs.

Section 9: Physical & Chemical Properties

Physical State:	Liquid	Appearance & Odor:	Clear, water-white liquid.
Specific Gravity:	0.8031	Boiling Point:	147 °F
Freezing Point:	ND	Vapor Pressure:	96 mm
Evaporation Rate:	Fast	Vapor Density (air = 1)	1.11
pH:	NA	Solubility:	Complete with water.
Volatile Organic Compounds:%:	89.0	g/L:	729
		lbs./gal:	6.08

Section 10: Stability and Reactivity

Stability:	Stable	Hazardous Polymerization:	No
Chemical Incompatibilities:	Strong oxidizers.		
Materials to Avoid:	Sources of ignition.		
Hazardous Decomposition Products:	None		

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. See Section 3 of this MSDS for acute symptoms of overexposure and carcinogenicity information.

Section 12: Ecological Information

Ecotoxicity: No data available.
Environmental Fate: No data available for biodegradation.

Section 13: Disposal Considerations

Disposal: This material if discarded may be hazardous waste under U.S. EPA RCRA regulations. All disposal activities must comply with federal, state and local regulations. Contact your local or state environmental agency for specific rules. Do not dump into sewers, on the ground or into any body of water.

Section 14: Transportation Information

Shipping Name: Consumer Commodity
Hazard Class: ORM-D UN Number: NA Packing Group: NA
Label: NA Placard: NA
Special Provisions: NA

Section 15: Regulatory Information

TSCA: All components are either listed under TSCA or are exempt.
SARA Title III: Section 311/312: Acute, Pressure Section 313*: Methanol
CERCLA/Superfund (RQ): Mixture
Extremely Hazardous Substances: No
California Prop 65: No

* See section 2 for percentage

Section 16: Additional Information

Prepared By: Michelle Milburn Date: November 7, 2003
Technical Information: (800) 521-3168 CRC #: 638
This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label.

CAS: Chemical Abstract Service NA: Not Applicable
ppm: Parts per Million ND: Not Determined
TCC: Tag Closed Cup NE: Not Established
LEL: Lower Explosive Limit g/L: grams per Liter
UEL: Upper Explosive Limit lbs./gal: pounds per gallon
PPE: Personal Protection Equipment RQ: Reportable Quantity
COC: Cleveland Closed Cup TOC: Tag Open Cup



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PRODUCT NAME: 82-A SERIES INLINE RESIN SPLICING KIT
MANUFACTURER: 3M
DIVISION: Electrical Markets Division
ADDRESS: 3M Center
St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 02/03/2009
Supersedes Date: 02/03/2009
Document Group: 08-4951-3

ID Number(s):

80-6109-8155-9, 80-6109-8156-7, 80-6109-8157-5, 80-6109-8158-3

This product is a kit or a multipart product which consists of multiple, independently packaged components. An MSDS for each of these components is included. Please do not separate the component MSDSs from this cover page. The document numbers of the MSDSs for components of this product are:

24-9848-3, 24-9869-9

Revision Changes:
Kit: ID Number(s) was modified.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SCOTCHCAST RESIN 4 PART A
MANUFACTURER: 3M
DIVISION: Electrical Markets Division
ADDRESS: 3M Center, St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 04/07/11
Supersedes Date: 12/16/08

Document Group: 24-9848-3

Product Use:

Intended Use: Electrical
Specific Use: PART A OF RESIN 4

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	% by Wt
2,2-Bis(p-hydroxyphenyl)propane diglycidyl ether polymer	25085-99-8	80 - 100
OXIRANE, MONO[(C12-14-ALKYLOXY)METHYL]DERIVATIVES	68609-97-2	0 - 20

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Resin

Odor, Color, Grade: Clear, amber resin with epoxy odor

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: May cause allergic skin reaction.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Inhalation:

This product may have a characteristic odor; however, no adverse health effects are anticipated.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: No need for first aid is anticipated.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	No Data Available
Flash Point	≥ 201 °F [Test Method: Closed Cup]
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available

5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may be used to blanket the fire. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Not applicable.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode.

6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Contents may be under pressure, open carefully. Avoid skin contact. Do not ingest. For industrial or professional use only.

7.2 STORAGE

Keep container in well-ventilated area. Keep container tightly closed. Store in a cool, dry place.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

The following eye protection(s) are recommended: Indirect Vented Goggles

8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Neoprene

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Resin
Odor, Color, Grade:	Clear, amber resin with epoxy odor
General Physical Form:	Liquid
Autoignition temperature	<i>No Data Available</i>
Flash Point	>= 201 °F [<i>Test Method: Closed Cup</i>]
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Boiling Point	>= 201 °F
Density	1.16 g/ml
Vapor Density	<i>No Data Available</i>
Vapor Pressure	<= 27 psia [<i>@ 131 °F</i>]
Specific Gravity	1.16 [<i>Ref Std: WATER=1</i>]
pH	<i>No Data Available</i>
Melting point	<i>No Data Available</i>
Solubility In Water	<i>No Data Available</i>
Solubility in Water	Negligible
Evaporation rate	<i>No Data Available</i>
Kow - Oct/Water partition coef	<i>No Data Available</i>
Percent volatile	Negligible
Viscosity	3000 centipoise - 5000 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

None known

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Toxic Vapor, Gas, Particulate	During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Cure (harden, set, or react) the product according to product instructions.

Dispose of completely cured (or polymerized) wastes in a sanitary landfill.

As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator in the presence of a combustible material.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

LH-A100-0560-7, LH-A100-0560-8, LH-A100-0560-9, LH-A100-0561-0, LH-A100-0561-1, LH-A100-0561-2

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 2 Flammability: 1 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 2 Flammability: 1 Reactivity: 0 Protection: X - See PPE section.

Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

Revision Changes:

Section 16: Disclaimer (second paragraph) was modified.
Section 3: Potential effects from skin contact information was modified.
Section 5: Extinguishing media information was modified.
Section 5: Fire fighting procedures information was modified.
Section 5: Unusual fire and explosion hazard information was modified.
Section 7: Handling information was modified.
Section 8: Eye/face protection information was modified.
Section 8: Skin protection - recommended gloves information was modified.
Section 14: Transportation legal text was modified.
Section 9: Vapor pressure value was modified.
Section 9: Boiling point information was modified.
Section 5: Flammable limits (UE) information was modified.
Section 5: Flammable limits (LEL) information was modified.
Section 9: Property description for optional properties was modified.
Section 1: Initial issue message was modified.
Section 9: Flammable limits (LEL) information was modified.
Section 9: Flammable limits (UEL) information was modified.
Section 2: Ingredient table was modified.
Section 6: 6.2. Environmental precautions heading was added.
Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added.
Section 10.1 Conditions to avoid heading was added.
Section 10.2 Materials to avoid heading was added.
Section 16: Web address was added.
Section 6: Personal precautions information was added.
Section 6: Environmental procedures information was added.
Section 6: Methods for cleaning up information was added.
Section 10: Materials to avoid physical property was added.
Section 10: Conditions to avoid physical property was added.

Section 1: Address was added.
Copyright was added.
Company logo was added.
Section 6: Clean-up methods heading was added.
Telephone header was added.
Company Telephone was added.
Section 1: Emergency phone information was added.
Section 1: Emergency phone information was deleted.
Company Logo was deleted.
Copyright was deleted.
Section 3: Immediate physical hazard(s) was deleted.
Section 6: Release measures information was deleted.
Section 6: Release measures heading was deleted.
Section 10: Materials and conditions to avoid physical property was deleted.
Section 1: Address line 1 was deleted.
Section 1: Address line 2 was deleted.

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3M USA MSDSs are available at www.3M.com



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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SCOTCHCAST RESIN 4 PART B
MANUFACTURER: 3M
DIVISION: Electrical Markets Division
ADDRESS: 3M Center, St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 01/05/12
Supersedes Date: 10/17/11

Document Group: 24-9869-9

Product Use:

Intended Use: Electrical
 Specific Use: PART B OF RESIN 4

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
PHENOL, 4-NONYL-, branched	84852-15-3	15 - 40
N-AMINOETHYLPIPERAZINE	140-31-8	5 - 20
HEAVY NAPHTHENIC DISTILLATE SOLVENT PETROLEUM EXTRACTS	64742-11-6	5 - 20
REACTION PRODUCTS WITH TRIETHYLENETETRAMINE	Trade Secret	5 - 20
REACTION PRODUCTS WITH TETA AND DGEBA	Trade Secret	4 - 10
PETROLEUM DISTILLATES	Trade Secret	1 - 6
REACTION PRODUCTS WITH ETHER	Trade Secret	1 - 6
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	90-72-2	1 - 5
TRIETHYLENETETRAMINE	112-24-3	1 - 3
CARBON BLACK	1333-86-4	< 1
DIETHYLENETRIAMINE	111-40-0	0 0.2
(2-AMINOETHYL)ETHANOLAMINE	111-41-1	0 0.12

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Resin

Odor, Color, Grade: Smooth, black liquid with amine odor

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Vapors may travel long distances along the ground or floor to an ignition source and flash back. May cause chemical eye burns. May cause allergic skin reaction. May cause chemical skin burns. May cause chemical gastrointestinal burns. May cause allergic respiratory reaction. Contains a chemical or chemicals which can cause cancer. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Skin Contact:

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

Ingestion:

May be harmful if swallowed.

Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Class Description</u>	<u>Regulation</u>
CARBON BLACK	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Flash Point	≥ 200 °F [<i>Test Method: Closed Cup</i>]
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>

5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Vapors may travel long distances along the ground or floor to an ignition source and flash back.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode.

6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Contents may be under pressure, open carefully. Avoid breathing of vapors, mists or spray. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

7.2 STORAGE

Store away from acids. Keep container in well-ventilated area. Store away from areas where product may come into contact with food or pharmaceuticals.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust ventilation on open containers. If exhaust ventilation is not available, use appropriate respiratory protection. Do not use in a confined area or areas with little or no air movement.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

The following eye protection(s) are recommended: Indirect Vented Goggles

8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Butyl Rubber

Neoprene

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface supplied-air respirator

Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with your respirator manufacturer for selection of appropriate types of respirators.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
CARBON BLACK	ACGIH	TWA, inhalable fraction	3 mg/m3	
CARBON BLACK	CMRG	TWA	0.5 mg/m3	
CARBON BLACK	OSHA	TWA	3.5 mg/m3	
DIETHYLENETRIAMINE	ACGIH	TWA	1 ppm	Skin Notation*
TRIETHYLENETETRAMINE	AIHA	TWA	6 mg/m3	Skin Notation*
TRIS(2,4,6-	CMRG	TWA	5 ppm	

DIMETHYLAMINOMONOMETHYL)PHEN
OL

* Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists
 CMRG: Chemical Manufacturer Recommended Guideline
 OSHA: Occupational Safety and Health Administration
 AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	Resin
Odor, Color, Grade:	Smooth, black liquid with amine odor
General Physical Form:	Liquid
Flash Point	>= 200 °F [<i>Test Method:</i> Closed Cup]
Flammable Limits(LEL)	<i>No Data Available</i>
Flammable Limits(UEL)	<i>No Data Available</i>
Boiling Point	>= 200 °F
Density	1.04 g/ml
Vapor Density	<i>No Data Available</i>
Vapor Pressure	<= 27 psia [<i>@</i> 131 °F]
Specific Gravity	1.04 [<i>Ref Std:</i> WATER=1]
Solubility in Water	Negligible
Evaporation rate	<i>No Data Available</i>
Kow - Oct/Water partition coef	<i>No Data Available</i>
Percent volatile	3 % - 5 %
Viscosity	2200 centipoise - 3500 centipoise

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

None known

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance

Amine Compounds
Carbon monoxide
Carbon dioxide
Oxides of Nitrogen

Condition

During Combustion
During Combustion
During Combustion
During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, dispose of waste product in a facility permitted to accept chemical waste.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

LH-A100-0562-8, LH-A100-0562-9, LH-A100-0563-0, LH-A100-0563-1, LH-A100-0563-2, LH-A100-0563-3

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

Ingredient

CARBON BLACK

C.A.S. No.

1333-86-4

Classification

**Carcinogen

** WARNING: contains a chemical which can cause cancer.

CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 3 Flammability: 1 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

HMIS Hazard Classification

Health: 3 Flammability: 1 Reactivity: 0 Protection: X - See PPE section.

Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

Revision Changes:

Section 3: Potential effects from ingestion information was modified.

Section 8: Engineering controls information was modified.

Section 2: Ingredient table was modified.

Section 6: Environmental procedures information was modified.

Copyright was modified.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

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3M USA MSDSs are available at www.3M.com



Material Safety Data Sheet

An **RPM** Company

24 Hour Emergency Phone Numbers:

Medical/Poison Control:

1-800-327-3874

1-513-558-5111

Transportation/National Response Center:

1-800-535-5053

1-352-323-3500

NOTE: The National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this MSDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this MSDS are further described in Section 16.

Section 1 - Chemical Product / Company Information

This Material Safety Data Sheet is available in Canadian French and Hispanic American Spanish upon request.

On peut demander cette fiche signalétique (MSDS) à la langue française-canadienne.

Los Datos de Seguridad del Producto pueden obtenerse en Español si lo requiere.

Product Name:	DAP® BEATS THE NAIL® VOC Construction Adhesive	Revision Date:	09/10/2007
Product UPC Number:	070798270589, 070798270503, 070798274501, 070798274587, 070798274808	Supercedes:	08/01/2003
Product Use/Class:	GP Construction Adhesive Latex	MSDS Number:	00077095001
Manufacturer:	DAP Inc. 2400 Boston Street Suite 200 Baltimore, MD 21224-4723 888-327-8477 (non-emergency matters)		

Section 2 - Hazards Identification

Emergency Overview: A colored paste product with a very slight ammonia odor. **WARNING!** May cause eye, skin, nose, throat and respiratory tract irritation. Harmful if swallowed or absorbed through the skin.

Refer to other MSDS sections for other detailed information.

Effects Of Overexposure - Eye Contact: May cause eye irritation.

Effects Of Overexposure - Skin Contact: May cause skin irritation. Harmful if absorbed through the skin.

Effects Of Overexposure - Inhalation: Harmful if inhaled. Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes).

Effects Of Overexposure - Ingestion: Harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: Repeated or prolonged exposure may cause respiratory system damage.

Prolonged and repeated skin contact may cause irritation and possibly dermatitis. Overexposure may cause kidney, cardiovascular, skin and liver damage.

Formaldehyde vapor is a known animal carcinogen according to OSHA and NTP and is considered possibly carcinogenic to humans by inhalation. The International Agency for Research on Cancer considers formaldehyde to be a human carcinogen.

This product contains vinyl acetate which is classified as a class 2B carcinogen by IARC. Vinyl acetate was found to cause cancer in the respiratory tract of laboratory animals. There is no evidence that vinyl acetate causes cancer in humans. The IARC published a monograph on vinyl acetate (1995). In this monograph, IARC indicates "there is inadequate evidence in humans for carcinogenicity of vinyl acetate. There is limited evidence in experimental animals for the carcinogenicity of vinyl acetate." Normally, this lack of conclusive evidence would place a substance in the IARC 3 classification (not classified as a human carcinogen). However, because vinyl acetate is metabolized to acetaldehyde, which has an IARC 2B (possibly carcinogenic to humans) classification, it also has been listed under Category 2B.

Primary Route(s) Of Entry: Skin Contact, Inhalation, Ingestion, Eye Contact

Medical Conditions which May be Aggravated by Exposure: None known.

Carcinogenicity:

CAS No.	Chemical Name	ACGIH	OSHA	IARC	NTP
14808-60-7	Silica, crystalline	Suspected human carcinogen.	Not Listed.	Human carcinogen.	Known carcinogen.
108-05-4	Vinyl acetate	Confirmed animal carcinogen with unknown relevance to humans.	Not Listed.	Possible carcinogen.	Not Listed.
50-00-0	Formaldehyde	Suspected human carcinogen.	Potential cancer hazard.	Human carcinogen.	Anticipated carcinogen.
75-07-0	Acetaldehyde	Confirmed animal carcinogen with unknown relevance to humans.	Not Listed.	Possible carcinogen.	Anticipated carcinogen.

Section 3 - Composition / Information On Ingredients

Chemical Name	CASRN	Wt%
Limestone	1317-65-3	30-60
Magnesium aluminum silicate	12174-11-7	1-5
Urea	57-13-6	0.5-1.5
Silica, crystalline	14808-60-7	0.1-1.0
Ammonia	7664-41-7	0.1-1.0
Vinyl acetate	108-05-4	<0.07
Formaldehyde	50-00-0	<0.008
Acetaldehyde	75-07-0	<0.002

Section 4 - First Aid Measures

First Aid - Eye Contact: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately.

First Aid - Skin Contact: Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical aid if symptoms persist. Remove and wash contaminated clothing.

First Aid - Inhalation: If inhaled, remove to fresh air. If breathing is difficult, leave the area to obtain fresh air. If continued breathing difficulty is experienced, get medical attention immediately.

First Aid - Ingestion: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

Note to Physician: None.

COMMENTS: Call Medical Emergency at 1-800-327-3874 if any irritation or complication arises from any of the above routes of entry.

Section 5 - Fire Fighting Measures

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: No special protective measures against fire required.

Special Firefighting Procedures: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Wear proper protective equipment as specified in Section 8. Use absorbent material or scrape up dried material and place in container.

Section 7 - Handling And Storage

Handling: KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Avoid breathing vapor and contact with eyes, skin and clothing. Use only with adequate ventilation. Open all windows and doors or use other means to ensure cross-ventilation and fresh air entry during application and drying. Odor is not an adequate warning for hazardous conditions. Wash thoroughly after handling.

Storage: Do not store at temperatures above 120 degrees F. Store containers away from excessive heat and freezing. Close container after each use. Store away from caustics and oxidizers.

Section 8 - Exposure Controls / Personal Protection

Chemical Name	CASRN	ACGIH TWA	ACGIH STEL	ACGIH CEIL	OSHA TWA	OSHA STEL	OSHA CEIL	Skin
Limestone	1317-65-3	10 MGM3	N.E.	N.E.	5 MGM3 (respirable fraction)	N.E.	N.E.	No
Magnesium aluminum silicate	12174-11-7	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	No
Urea	57-13-6	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	No
Silica, crystalline	14808-60-7	0.05 MGM3	N.E.	N.E.	10/(%SiO ₂ + 2) MGM3	N.E.	N.E.	No
Ammonia	7664-41-7	25 PPM	35 PPM	N.E.	50 PPM	N.E.	N.E.	No
Vinyl acetate	108-05-4	10 PPM	15 PPM	N.E.	N.E.	N.E.	N.E.	No
Formaldehyde	50-00-0	N.E.	N.E.	0.3 PPM	0.75 PPM	2 PPM	N.E.	No
Acetaldehyde	75-07-0	N.E.	N.E.	25 PPM	200 PPM	N.E.	N.E.	No

Exposure Notes:

50-00-0 Formaldehyde is a specially regulated substance for which an OSHA chemical-specific exposure standard exists. Detailed information regarding this substance may be found in 29 CFR 1910.1048. Medical surveillance information regarding this substance may be found in Appendix C to 29 CFR 1910.1048.

Precautionary Measures: Please refer to other sections and subsections of this MSDS.

Engineering Controls: Good general ventilation should be sufficient to control airborne levels. Ensure adequate ventilation, especially in confined areas. Local ventilation of emission sources may be necessary to maintain ambient concentrations below recommended exposure limits.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment. A NIOSH-approved air purifying respirator with an organic vapor cartridge or canister may be necessary under certain circumstances where airborne concentrations are expected to exceed exposure limits. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

Skin Protection: Rubber gloves.

Eye Protection: Goggles or safety glasses with side shields.

Other protective equipment: Not required under normal use.

Hygienic Practices: Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use.

Important: Listed Permissible Exposure Levels (PEL) are from the U.S. Dept. of Labor OSHA Final Rule Limits (CFR 29 1910.1000); these limits may vary between states.

Note: An employee's skin exposure to substances having a "YES" in the "SKIN" column in the table above shall be prevented or reduced to the extent necessary under the circumstances through the use of gloves, coveralls, goggles or other appropriate personal protective equipment, engineering controls or work practices.

Section 9 - Physical And Chemical Properties

Boiling Range:	Not Established	Vapor Density:	Heavier Than Air
Odor:	Very Slight Ammonia	Odor Threshold:	Not Established
Color:	Colored	Evaporation Rate:	Slower Than n-Butyl Acetate
Solubility in H2O:	Not Established	Specific Gravity:	1.5
Freeze Point:	Not Established	pH:	Between 7.0 and 12.9
Vapor Pressure:	Not Established	Viscosity:	Not Established
Physical State:	Paste	Flammability:	Non-Flammable
Flash Point, F:	> 200 F	Method:	(Seta Closed Cup)
Lower Explosive Limit, %:	Not Established	Upper Explosive Limit, %:	Not Established

When reported, vapor pressure of this product has been calculated theoretically based on its constituent makeup and has not been determined experimentally.

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Excessive heat and freezing.

Incompatibility: Incompatible with strong bases and oxidizing agents.

Hazardous Decomposition Products: Normal decomposition products, i.e., COx, NOx.

Hazardous Polymerization: Hazardous polymerization will not occur under normal conditions.

Stability: Stable under recommended storage conditions.

Section 11 - Toxicological Information

Product LD50: Not Established

Product LC50: Not Established

CASRN	Chemical Name	LD50	LC50
57-13-6	Urea	Rat:8471 mg/kg	-----
7664-41-7	Ammonia	-----	Rat:2000 ppm/4H
108-05-4	Vinyl acetate	-----	Rat:11400 mg/m ³ /4H
50-00-0	Formaldehyde	-----	Rat:203 mg/m ³
75-07-0	Acetaldehyde	-----	Rat:13300 ppm/4H

Significant Data with Possible Relevance to Humans: This product contains trace amounts of free formaldehyde. OSHA and NTP identify formaldehyde as a potential carcinogen. IARC identifies formaldehyde as a human carcinogen. Formaldehyde has been shown to cause mutations in a variety of in-vitro test systems, the significance of which to humans is unknown. There should be minimal risk when used with ventilation adequate to keep the atmospheric concentration of formaldehyde below the recommended exposure limits. Maintain adequate ventilation to prevent exposure above current OSHA / ACGIH exposure limits. Workplace monitoring of the air to define formaldehyde exposure levels may be necessary. In a two-year inhalation study, rats showed carcinogenic effects in the respiratory system at 15 ppm of formaldehyde.

Section 12 - Ecological Information

Ecological Information: Ecological injuries are not known or expected under normal use.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

EPA Waste Code if Discarded (40 CFR Section 261): None.

Section 14 - Transportation Information

DOT Proper Shipping Name:	Not Regulated	Packing Group:	N.A.
DOT Technical Name:	N.A.	Hazard Subclass:	N.A.
DOT Hazard Class:	N.A.	DOT UN/NA Number:	None

Note: The shipping information provided is applicable for domestic ground transport only. Different categorization may apply if shipped via other modes of transportation and/or to non-domestic destinations.

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category:

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Immediate Health Hazard, Chronic Health Hazard

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

None

Toxic Substances Control Act:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product:

Chemical Name	CAS Number
Water	7732-18-5

Non-Hazardous Polymer	Proprietary
Acrylic polymer	Proprietary

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%:

Chemical Name	CAS Number
Water	7732-18-5
Non-Hazardous Polymer	Proprietary
Acrylic polymer	Proprietary

California Proposition 65:

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Section 16 - Other Information

HMIS Ratings:

Health: 1	Flammability: 1	Reactivity: 0	Personal Protection: X
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Volatile Organic Compounds (VOC), less water less exempts: g/L: 2.4 lb/gal: 0.0 wt:wt%: 0.1

Volatile Organic Compounds (VOC), less water less exempts, less LVP -VOCs: wt:wt%: 0.1

REASON FOR REVISION: Periodic Update

Legend:	N.A. – Not Applicable	ACGIH – American Conference of Governmental Industrial Hygienists
	N.E. – Not Established	SARA – Superfund Amendments and Reauthorization Act of 1986
	N.D. – Not Determined	NJRTK – New Jersey Right-to-Know Law
	VOC – Volatile Organic Compound	OSHA – Occupational Safety and Health Administration
	PEL – Permissible Exposure Limit	HMIS – Hazardous Materials Identification System
	TLV – Threshold Limit Value	NTP – National Toxicology Program
	CEIL – Ceiling Exposure Limit	STEL – Short Term Exposure Limit
	LD50 – Lethal Dose 50	LC50 – Lethal Concentration 50
	F – Degree Fahrenheit	MSDS – Material Safety Data Sheet
	C – Degree Celsius	CASRN – The Chemical Abstracts Service Registry Number

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. **NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS.** Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

<End of MSDS>

Material Safety Data Sheet

SECTION I - Material Identity
SECTION II - Manufacturer's Information
SECTION III - Physical/Chemical Characteristics
SECTION IV - Fire and Explosion Hazard Data
SECTION V - Reactivity Data
SECTION VI - Health Hazard Data
SECTION VII - Precautions for Safe Handling and Use
SECTION VIII - Control Measures
SECTION IX - Label Data
SECTION X - Transportation Data
SECTION XI - Site Specific/Reporting Information
SECTION XII - Ingredients/Identity Information

SECTION I - Material Identity

Item Name	
Part Number/Trade Name	IDEAL TYPE 55 MARKER INK AND IDEAL MARK PENS
National Stock Number	7520005581487
CAGE Code	30133
Part Number Indicator	A
MSDS Number	181347
HAZ Code	A

SECTION II - Manufacturer's Information

Manufacturer Name	IDEAL STENCIL MACHINE AND TAPE COMPANY
Street	102 IOWA AVE
City	BELLEVILLE
State	IL
Country	US
Zip Code	62220
Emergency Phone	800-424-9300
Information Phone	618-233-0162

MSDS Preparer's Information

Date MSDS Prepared/Revised	04JAN95
Active Indicator	N

Alternate Vendors

SECTION III - Physical/Chemical Characteristics

Hazard Storage Compatibility Code	NR
NRC License Number	NR
Net Propellant Weight (Ammo)	NR
Appearance/Odor	SHARP, AROMATIC ODOR. WHITE OPAQUE LIQUID
Boiling Point	280-340F
Melting Point	NAP
Vapor Pressure	5
Vapor Density	>1
Specific Gravity	1.19
Decomposition Temperature	NR
Evaporation Rate	NR
Solubility in Water	0%
Percent Volatiles by Volume	75%
Chemical pH	NR
Corrosion Rate	NR
Container Pressure Code	4
Temperature Code	8
Product State Code	L

SECTION IV - Fire and Explosion Hazard Data

Flash Point Method	TCC
Lower Explosion Limit	1
Upper Explosion Limit	7
Extinguishing Media	ALCOHOL FOAM, DRY CHEMICAL, CO2
Special Fire Fighting Procedures	WEAR SCBA AND RULL PROTECTIVE CLOTHING WHEN LARGE AMOUNTS ARE INVOLVED. STREAM OF WATER MAY HELP TO SPREAD FIRE. CAN BE USED OT COOL CONTAINERS

SECTION V - Reactivity Data

Stability	YES
Stability Conditions to Avoid	NONE
Materials to Avoid	STRONG OXIDIZING AGENTS
Hazardous Decomposition Products	HYDROCARBONS
Hazardous Polymerization	NO
Polymerization Conditions to Avoid	WILL NOT OCCUR

SECTION VI - Health Hazard Data

Route of Entry: Skin	YES
Route of Entry: Ingestion	YES
Route of Entry: Inhalation	YES
Health Hazards - Acute and Chronic	REPEATED OVEREXPOSURE MAY CAUSE DAMAGE TO LIVER, KIDNEYS, LUNGS, BLOOD, CARDIOVASUCAL SYSTEM, REPRODUCTIVE SYSTEM. FLAMMABLE LIQUID/VAPOR MAY CAUSE EYE, SKIN, AND GASTROINTESTINAL TRACT IRRITATION. MAY AFFECT CENTRAL NERVOUS SYSTEM

Carcinogenity: NTP	NO
Carcinogenity: IARC	NO
Carcinogenity: OSHA	NO
Explanation of Carcinogenity	DOES NOT CONTAIN MATERIAL S LISTED AS CANCER CAUSERS
Symptoms of Overexposure	INHALE:MAY CAUSE HEADACHE, DIZZINESS, OTHER CENTRAL NERVOUS SYSTEM EFFECTS.MAY IRRITATE RESPIRATORY TRACT.EYE:MAY CAUSE SEVERE IRRITATION, REDNESS, TEARING AND BLURRED VISION.SKIN:MILD TO SEVERE IRRITATION, REDDENING, DEFATTING AND CHAPPING.INGEST:MAY CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA
Emergency/First Aid Procedures	INHALE:REMOVE TO FRESH AIR.CALL PHYSICIAN.EYE:FLUSH W/PLENTY OF WATER.CALL PHYSICIAN IMMED.SKIN:WASH W/SOAP/WATER.REMOVE CONTAMINATED CLOTHING AND LAUNDRER BEFORE USE.INGESTION:DO NOT INDUCE VOMITING.CALL A PHYSICIAN

SECTION VII - Precautions for Safe Handling and Use

Steps if Material Released/Spilled	SMALL:SOAK UP W/ABSORBENT & PLACE IN WELL-VENTILATED AREA OR IN CLOSED.LARGE:REMOVE ALL IGNITION SOURCES AND USE PROPER PROTECTIVE EQUIP.STOP SPILL AT SOURCE AND DIKE.TAKE UP W/ABSORBENT
Waste Disposal Method	IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS
Handling and Storage Precautions	KEEP CONTAINERS CLOSED.GROUND AND BOND CONTAINERS WHEN TRANSFERRING.EMPTY CONTAINERS WILL CONTAIN FLAMMABLE VAPORS
Other Precautions	STORE IN COOL, WELL-VENTILATED AREA AWAY FROM HEAT, SPARKS, OR FLAMES

SECTION VIII - Control Measures

Respiratory Protection	NOT USUALLY REQUIRED UNLESS IN CONFINED AREA.THEN A NIOSH/MSHA APPROVED RESPIRATOR WITH ORGANIC VAPOR CARTRIDGES OR CANNISTER SHOULD BE USED
Ventilation	GENERAL EXHAUST IS USUALLY SUFFICIENT TO KEEP VAPOR LEVELS BELOW THE TVL'S
Protective Gloves	NITRILE RUBBER WHEN NECESSARY
Eye Protection	CHEMICAL SPLASH GOGGLES IF SPLASHING
Disposal Code	0

SECTION IX - Label Data

Protect Eye	YES
Protect Skin	YES

Protect Respiratory	NO
Chronic Indicator	UNKNOWN
Contact Code	SLIGHT
Fire Code	UNKNOWN
Health Code	UNKNOWN
React Code	UNKNOWN

SECTION X - Transportation Data

Container Quantity	.35
Unit of Measure	OZF

SECTION XI - Site Specific/Reporting Information

Volatile Organic Compounds (P/G)	5.449
Volatile Organic Compounds (G/L)	653

SECTION XII - Ingredients/Identity Information

Ingredient #	01
Ingredient Name	BENZENE, DIMETHYL-
CAS Number	1330207
Proprietary	NO
Percent	60
OSHA PEL	100
ACGIH TLV	100

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

Section 1 - Chemical Product / Company Information

Product Name: ICWB LSPR 12PK FLUOR RED-ORANGE MARKING Revision Date: 03/10/2010

Identification Number: 203037

Product Use/Class: Marking Paint/Aerosol

Supplier: Rust-Oleum Corporation Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway 11 Hawthorn Parkway
Vernon Hills, IL 60061 Vernon Hills, IL 60061
USA USA

Preparer: Regulatory Department

Section 2 - Composition / Information On Ingredients

Chemical Name	CAS Number	Weight % Less		ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL CEILING
		Than					
Liquefied Petroleum Gas	68476-86-8	30.0		N.E.	N.E.	N.E.	N.E.
Toluene	108-88-3	10.0		20 ppm	N.E.	200 ppm	300 ppm
Aliphatic Hydrocarbon	64742-89-8	10.0		100 ppm	N.E.	100 ppm	N.E.
Mineral Spirits	64742-88-7	5.0		100 ppm	N.E.	100 ppm	N.E.
Hydrotreated Light Distillate	64742-47-8	5.0		200 mg/m ³	N.E.	N.E.	N.E.
Ethylbenzene	100-41-4	1.0		100 ppm	125 ppm	100 ppm	N.E.
Pigment Orange 13	3520-72-7	1.0		N.E.	N.E.	N.E.	N.E.

Section 3 - Hazards Identification

*** Emergency Overview ***: Contents Under Pressure. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Vapors may cause flash fire or explosion. Harmful if swallowed. Extremely flammable liquid and vapor.

Effects Of Overexposure - Eye Contact: Causes eye irritation.

Effects Of Overexposure - Skin Contact: Prolonged or repeated contact may cause skin irritation. Substance may cause slight skin irritation.

Effects Of Overexposure - Inhalation: High vapor concentrations are irritating to the eyes, nose, throat and lungs. Avoid breathing vapors or mists. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Harmful if inhaled.

Effects Of Overexposure - Ingestion: Aspiration hazard if swallowed; can enter lungs and cause damage. Substance may be harmful if swallowed.

Effects Of Overexposure - Chronic Hazards: May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous

system damage.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

First Aid - Skin Contact: Wash with soap and water. Get medical attention if irritation develops or persists.

First Aid - Inhalation: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

First Aid - Ingestion: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: -156 F
(Setaflash)

LOWER EXPLOSIVE LIMIT: 0.9 %
UPPER EXPLOSIVE LIMIT : 9.5 %

Extinguishing Media: Film Forming Foam, Carbon Dioxide, Dry Chemical, Water Fog

Unusual Fire And Explosion Hazards: Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

Special Firefighting Procedures: Evacuate area and fight fire from a safe distance.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools.

Section 7 - Handling And Storage

Handling: Wash thoroughly after handling. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist. Use only in a well-ventilated area. Wash hands before eating.

Storage: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

Respiratory Protection: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

Skin Protection: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other protective equipment: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

Hygienic Practices: Wash thoroughly with soap and water before eating, drinking or smoking.

Section 9 - Physical And Chemical Properties

Boiling Range:	-34 - 415 F	Vapor Density:	Heavier than Air
Odor:	Solvent Like	Odor Threshold:	N.E.
Appearance:	Aerosolized Mist	Evaporation Rate:	Faster than Ether
Solubility in H ₂ O:	Slight		
Freeze Point:	N.D.	Specific Gravity:	0.854
Vapor Pressure:	N.D.	PH:	N.A.
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

Incompatibility: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

Hazardous Decomposition: When heated to decomposition, it emits acrid smoke and irritating fumes. By open flame, carbon monoxide and carbon dioxide.

Hazardous Polymerization: Will not occur under normal conditions.

Stability: This product is stable under normal storage conditions.

Section 11 - Toxicological Information

Product LD50: N.D.

Product LC50: N.D.

3/10/2010

Chemical Name	LD50	LC50
Liquefied Petroleum Gas	N.E.	N.E.
Toluene	636 mg/kg (Rat, Oral)	> 26700 ppm (Rat, Inhalation, 1 Hr)
Aliphatic Hydrocarbon	>5000 mg/kg (Rat, Oral)	N.E.
Mineral Spirits	>8 mg/kg (Rat, Oral)	>1400 ppm (Rat, Inhalation, 4Hr)
Hydrotreated Light Distillate	>3160 mg/kg (Skin)	N.E.
Ethylbenzene	3500 mg/kg (Rat, Oral)	N.E.
Pigment Orange 13	>5000 mg/kg (Rat)	N.E.

Section 12 - Ecological Information

Ecological Information: Product is a mixture of listed components.

Section 13 - Disposal Information

Disposal Information: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

Section 14 - Transportation Information

DOT Proper Shipping Name:	ORM-D, Consumer Commodity	Packing Group:	N.A.
DOT Technical Name:	N.A.	Hazard Subclass:	N.A.
DOT Hazard Class:	ORM-D	Resp. Guide Page:	126
DOT UN/NA Number:	N.A.		

Section 15 - Regulatory Information

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD, PRESSURIZED GAS HAZARD

SARA Section 313:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS Number
Toluene	108-88-3

Toxic Substances Control Act:

Listed below are the substances (if any) contained in this product that are subject to the reporting requirements of TSCA 12(B) if exported from the United States:

It is the policy of Rust-Oleum Corporation to use only TSCA compliant materials in its products.

U.S. State Regulations: As follows -**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u>	<u>CAS Number</u>
Water	7732-18-5
Limestone	1317-65-3

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Chemical Name</u>	<u>CAS Number</u>
Water	7732-18-5
Limestone	1317-65-3
Polymer Anchored Orange Dye Dispersion	MIXTURE
Barium Sulfate	7727-43-7

California Proposition 65:

WARNING! This product contains a chemical(s) known by the State of California to cause cancer.

WARNING! This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

International Regulations: As follows -**CANADIAN WHMIS:**

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: AB5 D2A D2B

Section 16 - Other Information**HMIS Ratings:**

Health: 2* Flammability: 4 Reactivity: 0 Personal Protection: X

REASON FOR REVISION: Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this material safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is

the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

MATERIAL SAFETY DATA SHEET FOR ODORIZED PROPANE

1. Chemical Product and Company Identification

Product Name: Odorized Commercial Propane

Chemical Name: Propane

Chemical Family: Paraffinic Hydrocarbon

Formula: C₃H₈

Synonyms: Dimethylmethane, LP-Gas, Liquefied Petroleum Gas (LPG), Propane, Propyl Hydride

Transportation Emergency Number:

CHEMTREC 1-800-424-9300

Name & Address:

AmeriGas Propane, L.P.

P. O. Box 965

Valley Forge, PA. 19482

For General Information, Call:

1-888-808-0396, Safety Dept.

2. Composition / Information on Ingredients

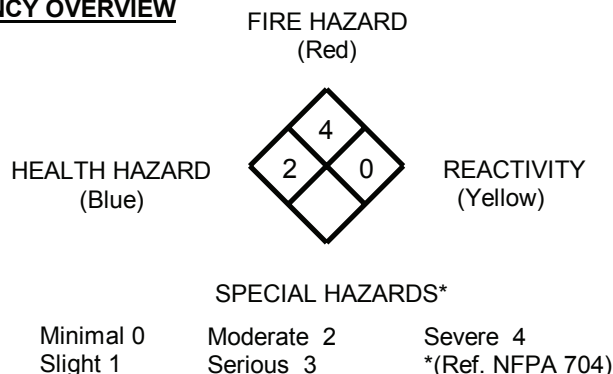
INGREDIENT NAME /CAS NUMBER	PERCENTAGE	OSHA PEL	ACGIH TLV
Propane / 74-98-6	87.5 -100	1,000 ppm	Simple asphyxiant
Ethane / 74-84-0	0 - 7.0		Simple asphyxiant
Propylene / 115-07-1	0 - 5.0		Simple asphyxiant
Butanes / 106-97-8	0 - 2.5		Simple asphyxiant
Ethyl Mercaptan / 75-08-1.....	0 - 50 ppm	0.5 ppm	0.5 ppm

WARNING: The intensity of the chemical odorant (e.g., ethyl mercaptan) may "fade" or diminish due to chemical oxidation, adsorption or absorption. Individuals with nasal perception problems may not be able to smell the odorant. Leaking propane from underground gas lines may lose its odor as it passes through certain soils. No odorant is effective 100% of the time. Therefore, circumstances can exist when individuals are in the presence of leaking propane and not be alerted by the smell. Contact AmeriGas for more information about odor, propane gas detectors and other safety considerations associated with the handling, storage and use of propane.

3. Hazards Identification

EMERGENCY OVERVIEW

DANGER! Flammable liquefied gas under pressure. Keep away from heat, sparks, flame, and all other ignition sources. Vapor replaces oxygen available for breathing and may cause suffocation in confined spaces. Use only with adequate ventilation. Reliance upon detection of odor may not provide adequate warning of potentially hazardous concentrations. Vapor is heavier than air; may collect at low levels. Liquid can cause freeze burn similar to frostbite. Do not get liquid in eyes, on skin, or on clothing. Avoid breathing vapor. Keep service valve closed when not in use.



POTENTIAL HEALTH EFFECTS INFORMATION

ROUTES OF EXPOSURE:

Inhalation: Asphyxiation. Before suffocation could occur, the lower flammability limit of propane in air would be exceeded, possibly causing both an oxygen-deficient and explosive atmosphere. Exposure to concentrations >10% may cause dizziness. Exposure to atmospheres containing 19% or less oxygen will bring about unconsciousness without warning. Lack of sufficient oxygen may cause serious injury or death.

Eye Contact: Contact with liquid can cause freezing of tissue.

Skin Contact: Contact with liquid can cause frostbite.

Skin Absorption: None.

Ingestion: Ingestion is not expected to occur in normal use. However, liquid can cause freeze burn similar to frostbite.

CHRONIC EFFECTS: None.

CARCINOGENICITY: Propane is not listed by NTP, OSHA or IARC.

4. First Aid Measures

INHALATION: Individuals suffering from lack of oxygen should be removed to fresh air. If victim is not breathing, administer artificial respiration. If breathing is difficult, administer oxygen. Obtain immediate medical assistance.

EYE CONTACT: Gently flush eyes with lukewarm water. Obtain immediate medical assistance.

SKIN CONTACT: Remove saturated clothes, shoes and jewelry. Immerse affected area in lukewarm water not exceeding 105° F. Keep immersed. Obtain immediate medical assistance.

INGESTION: If swallowed, obtain immediate medical assistance.

5. Fire-Fighting Measures

FLASH POINT: -156°F (-104°C)

AUTOIGNITION: 842°F (432°C)

IGNITION TEMPERATURE IN AIR: 920°F to 1120°F (493°C to 549°C)

FLAMMABLE LIMITS IN AIR (% by volume): Lower: 2.15% Upper: 9.6%

EXTINGUISHING MEDIA: Dry chemical, CO₂, water spray or fog for surrounding area. Do not attempt to extinguish fire until propane source is isolated.

SPECIAL FIRE-FIGHTING INSTRUCTIONS: Evacuate all unnecessary personnel from the area. Allow only properly trained and protected emergency response personnel in area. A NIOSH approved self-contained breathing apparatus may be required. If gas flow cannot be shut off, do not attempt to extinguish fire. Allow fire to burn itself out. Use high volume water supply to cool exposed pressure containers and nearby equipment. Approach a flame-enveloped container from the sides, never from the ends. Use extreme caution when applying water to a container that has been exposed to heat or flame for more than a short time. For uncontrollable fires and/or when flame is impinging on container, withdraw all personnel and evacuate vicinity immediately.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Propane is heavier than air and can collect in low areas. Flash back along a vapor trail is possible. Pressure in a container can build up due to heat; and, container may rupture suddenly and violently without warning if pressure relief devices fail to function properly. If flames are against the container, withdraw immediately on hearing a rising sound, if venting increases in volume or intensity or if there is discoloration of the container due to fire. Propane released from a properly functioning relief valve on an overheated container can also become ignited.

HAZARDOUS COMBUSTION PRODUCTS: None.

6. Accidental Release Measures

IF MATERIAL IS RELEASED OR SPILLED: Evacuate the immediate area. Eliminate any possible sources of ignition and provide maximum ventilation. Shut off source of propane, if possible. If leaking from container or valve, contact your supplier or AmeriGas immediately.

7. Handling and Storage

HANDLING PRECAUTIONS: Propane vapor is heavier than air and can collect in low areas that are without sufficient ventilation. Conduct system checks for leaks with a leak detector or solution, never with flame. Make certain the container service valve is shut off prior to connecting or disconnecting. If container valve does not operate properly, discontinue use and contact AmeriGas. Never insert an object (e.g., wrench, screwdriver, pry bar, etc.) into pressure relief valve or cylinder valve cap openings. Do not drop or abuse cylinders. Never strike an arc on a gas container or make a container part of an electrical circuit. See Section 16, "OTHER INFORMATION", for additional precautions.

STORAGE PRECAUTIONS: Store in a safe, authorized location (outside, detached storage is preferred) with adequate ventilation. Specific requirements are listed in NFPA 58, LP-GAS CODE. Isolate from heat and ignition sources. Containers should never be allowed to reach temperature exceeding 125°F (52°C). Isolate from combustible materials. Provide separate storage locations for other compressed and flammable gases. Propane containers should be separated from oxygen cylinders or other oxidizers by a minimum distance of 20 feet, or by a barrier of non-combustible material at least 5 feet high having a fire rating of at least 1/2 hour. Full and empty cylinders should be segregated. Keep cylinders in an upright position at all times so that each pressure relief valve communicates with the vapor space. Keep container valve closed and plugged or capped when not in use. Install protective caps when cylinders are not connected for use. Empty containers retain some residue and should be treated as if they were full.

8. Exposure Control / Personal Protection

ENGINEERING CONTROLS

Ventilation: Provide ventilation adequate to ensure propane does not reach a flammable mixture.

RESPIRATORY PROTECTION

General Use: None.

Emergency Use: If concentrations are high enough to warrant supplied-air or NIOSH self-contained breathing apparatus, then the atmosphere may be flammable (See Section 5). Appropriate precautions must be taken regarding flammability.

PROTECTIVE CLOTHING: Avoid skin contact with liquid propane because of possibility of freeze burn. Wear gloves and protective clothing that are impervious to the product for the duration of the anticipated exposure.

EYE PROTECTION: Safety glasses, goggles or face shields are recommended when handling cylinders.

OTHER PROTECTIVE EQUIPMENT: Safety shoes are recommended when handling cylinders.

9. Physical and Chemical Properties

BOILING POINT: @ 14.7 psia = -44° F (@1.00 atm.pressure = -42°C)

SPECIFIC GRAVITY OF VAPOR (Air = 1) at 60° F (15.56°C): 1.50

SPECIFIC GRAVITY OF LIQUID (Water = 1) at 60° F: 0.504

VAPOR PRESSURE: @ 70° F (20°C) = 127 psig; @ 105° F (45°C) = 210 psig; @ 130°F (55°C) = 287 psig

EXPANSION RATIO (From liquid to gas @ 14.7 psia): 1 to 270

SOLUBILITY IN WATER: Slight, 0.1 to 1.0%

APPEARANCE AND ODOR: A colorless and tasteless gas at normal temperature and pressure. An odorant (ethyl mercaptan) is added to provide a strong unpleasant odor. Should a propane-air mixture reach the lower limits of flammability, the ethyl mercaptan concentration will be approximately 0.5 ppm in air.

ODORANT WARNING: Odorant is added to aid in the detection of leaks. One common odorant is ethyl mercaptan, CAS No. 75-08-1. Odorant has a foul smell. The ability of people to detect odors varies widely. Also, the odor level can be reduced by certain chemical reactions with material in the propane system or when fugitive propane gas from underground leaks passes through certain soils. No odorant will be 100% effective in all circumstances. If the presence of the odorant is not obvious, notify AmeriGas immediately.

10. Stability and Reactivity

STABILITY: Stable.

Conditions to Avoid: Keep away from high heat, strong oxidizing agents and sources of ignition.

REACTIVITY:

Hazardous Decomposition Products: Under fire conditions, fumes, smoke, carbon monoxide, aldehydes and other decomposition products. In most applications where there is inadequate venting to the outside air, incomplete combustion will produce carbon monoxide (a toxic gas) and potentially develop concentrations that can create a serious health hazard.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

Propane is non-toxic and is a simple asphyxiant. It has slight anesthetic properties. Higher concentrations may cause dizziness.

IRRITANCY OF MATERIAL: None.

REPRODUCTIVE EFFECTS: None

TERATOGENICITY: None

SENSITIZATION TO MATERIAL: None

MUTAGENICITY: None

SYNERGISTIC MATERIALS: None

12. Ecological Information

No adverse ecological effects are expected. Propane does not contain any Class I or Class II ozone-depleting chemicals (40 CFR Part 82). Propane is not listed as a marine pollutant by DOT (49 CFR Part 171).

13. Disposal Considerations

WASTE DISPOSAL METHOD: Do not attempt to dispose of residual or unused product in the container; return it to your supplier or contact AmeriGas for safe disposal. Residual product within a process system may be burned at a controlled rate if a suitable burning unit is available on site, and is done in accordance with federal, state and local regulations.

14. Transport Information

DOT SHIPPING NAME: Liquefied Petroleum Gas

IDENTIFICATION NUMBER: UN 1075

IMO SHIPPING NAME: Propane

IMO IDENTIFICATION NUMBER: UN 1978

HAZARD CLASS: 2.1 (Flammable Gas)

PRODUCT RQ: None

SHIPPING LABEL (S): Flammable Gas

PLACARD (WHEN REQUIRED): Flammable Gas

SPECIAL SHIPPING INFORMATION: Container must be transported in a well-ventilated vehicle, secured, and in a position such that the pressure relief device is in communication with the vapor space.

15. Regulatory Information

The following information concerns U.S. Federal regulatory requirements potentially applicable to this product. Not all such requirements are identified. Users of this product are responsible for their own regulatory compliance on a federal, state [provincial] and local level.

U.S. FEDERAL REGULATIONS

Environmental Protection Agency (EPA)

Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) - 40 CFR Parts 117 and 302

Reportable Quantity (RQ): None

Superfund Amendment and Reauthorization Act (SARA)

- Sections 302/304: Relates to emergency planning on threshold planning quantities (TPQ) and release reporting based on reportable quantities (RQ) of EPA's extremely hazardous substances (40 CFR Part 355).

Extremely Hazardous Substances: None

Threshold Planning Quantity (TPQ): None

- Sections 311/312: Relates to submission of material safety data sheets (MSDSs) and chemical inventory reporting with identification of EPA-defined hazard classes (40 CFR Part 370). The hazard classes for this product are:

IMMEDIATE: No **PRESSURE:** Yes **DELAYED:** No **REACTIVITY:** No **FLAMMABLE:** Yes

- Section 313: Relates to submission of annual reports of release of toxic chemicals that appear in 40 CFR Part 372. Propane does not require reporting under Section 313.

Toxic Substance Control Act (TSCA)

Propane is listed on the TSCA inventory.

Occupational Safety and Health Administration (OSHA)

The following 29 CFR Parts may apply to propane:

29 CFR 1910.110: *Storage and Handling of Liquefied Petroleum Gases*

29 CFR 1910.119: *Process Safety Management of Highly Hazardous Chemicals*

29 CFR 1910.1200: *Hazardous Communications*

Food and Drug Administration (FDA)

21 CFR 184.1655: Generally recognized as safe (GRAS) as a direct human food ingredient when used as a propellant, aerating agent and gas.

16. Other Information

SPECIAL PRECAUTIONS: Use piping and equipment adequately designed to withstand pressure to be encountered. NFPA 58, LP-GAS CODE and OSHA 29 CFR 1910.10 require that all persons employed in handling LP-gases be trained in proper handling and operating procedures, which the employer shall document. Contact your propane supplier or AmeriGas to arrange for the required training. Allow only trained and qualified persons to install and service propane containers and systems.

ISSUE INFORMATION

Issue Date: August 2011

Issued By: Director of Safety and Technology

Supersedes Date: December 2002

Phone Number: 1-610-337-7000

This material safety data sheet and the information it contains is offered to you in good faith as accurate. This Supplier does not manufacture this product, but is a supplier of the product that is independently produced by others. Much of the information contained in this data sheet was received from sources outside our Company. To the best of our knowledge this information is accurate, but this Supplier does not guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely, comply with all applicable laws and regulations and to assume the risks involved in the use of this product.

NO WARRANTY OR MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSES, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OF COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE.

MATERIAL SAFETY DATA SHEET

SECTION 1

PRODUCT AND COMPANY IDENTIFICATION

Trade Name: CARLON ELECTRICAL PRODUCTS STANDARD CLEAR PVC SOLVENT CEMENT
Product Numbers: VC9961P, VC9962, VC9963, VC9964, VC9963C, VC9965C
Product Use: Cement for PVC Plastic Pipe
Formula: PVC Resin in Solvent Solution
Synonyms: PVC Plastic Pipe Cement
Firm Name & Mailing Address: CARLON ELECTRICAL PRODUCTS c/o OATEY CO. 4700 West 160th Street
P.O. Box 35906 Cleveland, Ohio 44135, U.S.A.
<http://www.oatey.com>
Oatey Phone Number: (216) 267-7100 or (800) 321-9532
Emergency Phone Numbers: For Emergency First Aid call 1-303-623-5716 COLLECT. For chemical transportation emergencies ONLY, call Chemtrec at 1-800-424-9300. Outside the U.S. 1-703-527-3887.
Prepared By: Corporate Director - Safety and Environmental Compliance
Preparation Date: August 25, 2005

SECTION 2

COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENTS:</u>	<u>%wt/wt:</u>	<u>CAS NUMBER:</u>	<u>ACGIH TLV TWA:</u>	<u>OSHA PEL TWA:</u>	<u>OTHER:</u>
Tetrahydrofuran	30 - 65%	109-99-9	50 ppm(skin) 100 ppm STEL	200 ppm	25 ppm (Mfg)
Methyl Ethyl Ketone	10 - 30%	78-93-3	200 ppm 300 ppm STEL	200 ppm	None
Acetone	10 - 20%	67-64-1	500 ppm 750 ppm STEL	1000 ppm	None
PVC Resin (Non-hazardous)	10 - 20%	9002-86-2	10 mg/m3	15 mg/m3	None
Cyclohexanone	7 - 13%	108-94-1	20 ppm(skin) 50 ppm STEL	50 ppm	None
Amorphous Fumed Silica (Non-hazardous)	1 - 5%	112945-52-5	10 mg/m3	None Established	None

OSHA Hazard Classification: Flammable, irritant, organ effects

SECTION 3

HAZARDS IDENTIFICATION

Emergency Overview:
Clear liquid with an ether-like odor. Extremely flammable liquid and vapor. Vapors may cause flash fire. May cause eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects. Swallowing may cause irritation, nausea, vomiting, diarrhea and kidney or liver disorders. Aspiration hazard. May be fatal if swallowed. Symptoms may be delayed.

SECTION 4

FIRST AID MEASURES

CALL 1-303-623-5716 COLLECT

Skin: Remove contaminated clothing immediately. Wash all exposed areas with soap and water. Get medical attention if irritation develops. Remove dried cement with Oatey Plumber's Hand Cleaner or baby oil.

Eyes: If material gets into eyes or if fumes cause irritation, immediately flush eyes with plenty of water until chemical is removed. If irritation persists, get medical attention immediately.

Inhalation: If symptoms of exposure develop, remove to fresh air. If breathing becomes difficult, administer oxygen. Administer artificial respiration if breathing has stopped. Seek immediate medical attention.

Ingestion: **DO NOT INDUCE VOMITING.** Rinse mouth with water. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital.

SECTION 5 FIRE FIGHTING MEASURES

Flashpoint / Method: 0 - 5 Degrees F. (-18 - -15 Degrees C / PMCC
Flammability: LEL = 1.8 % Volume, UEL = 11.8 % Volume
Extinguishing: Use dry chemical, CO₂, or foam to extinguish fire. Cool fire exposed container with water. Water may be ineffective as an extinguishing agent.
Media:
Special Fire Fighting Procedure: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored
Unusual Fire and Explosion Hazards: Extremely flammable liquid. Keep away from heat and all sources of ignition including sparks, flames, lighted cigarettes and pilot lights. Containers may rupture or explode in the heat of a fire. Vapors are heavier than air and may travel to a remote ignition source and flash back. This product contains tetrahydrofuran that may form explosive organic peroxide when exposed to air or light or with age.
Hazardous Decomposition Products: Combustion will produce toxic and irritating vapors including carbon monoxide, carbon dioxide and hydrogen chloride.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Remove all sources of ignition and ventilate area. Stop leak if it can be done without risk. Personnel cleaning up the spill should wear appropriate personal protective equipment, including respirators if vapor concentrations are high. Soak up spill with an inert absorbent such as sand, earth or other non-combusting material. Put absorbent material in covered, labeled metal containers. Prevent liquid from entering watercourses, sewers and natural waterways. Report releases to authorities as required. See Section 13 for disposal information.

SECTION 7 HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use with adequate ventilation (equivalent to outdoors). Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Keep containers closed when not in use.
Storage: Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers closed when not in use.
Other: "Empty" containers retain product residue and can be hazardous. Follow all MSDS precautions in handling empty containers. Do not cut or weld on or near empty or full containers.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Open doors & windows. Provide ventilation capable of maintaining emissions at the point of use below recommended exposure limits. If used in enclosed area, use exhaust fans. Exhaust fans should be explosion-proof or set up in a way that flammable concentrations of solvent vapors are not exposed to electrical fixtures or hot surfaces.
Respiratory Protection: For operations where the exposure limit may be exceeded, a NIOSH approved organic vapor respirator or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.
Skin Protection: Rubber gloves are suitable for normal use of the product. For long exposures chemical resistant gloves may be required such as 4H(tm) or Silver Shield(tm) to avoid prolonged skin contact.

SECTION 8 (Continued)

Eye Safety glasses with sideshields or safety goggles.
Protection:
Other: Eye wash and safety shower should be available.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 151 Degrees F / 66 Degrees C
Melting Point: Not Applicable
Vapor Pressure: 145 mmHg @ 20 Degrees C
Vapor Density: (Air = 1) 2.5
Volatile Components: 81-85%
Solubility In Water: Negligible
pH: Not Applicable
Specific Gravity: 0.94 +/- 0.01 @ 20 Degrees C
Evaporation Rate: (BUAC = 1) = 5.5 - 8.0
Appearance: Clear Liquid
Odor: Ether-Like
Will Dissolve In: Tetrahydrofuran
Material Is: Liquid

SECTION 10 STABILITY AND REACTIVITY

Stability: Stable.
Conditions To Avoid: Avoid heat, sparks, flames and other sources of ignition.
Hazardous Combustion will produce toxic and irritating vapors
Decomposition including carbon monoxide, carbon dioxide and hydrogen
Products: chloride.
Incompatibility/ Oxidizing agents, alkalis, amines, ammonia, acids, chlorine
Materials To Avoid: compounds, chlorinated inorganics (potassium, calcium and
sodium hypochlorite) and hydrogen peroxides. May attack
plastic, resins and rubber.
Hazardous Will not occur.
Polymerization:

SECTION 11 TOXICOLOGICAL INFORMATION

Inhalation: Vapors or mists may cause mucous membrane and respiratory
irritation, coughing, headache, dizziness, dullness, nausea,
shortness of breath and vomiting. High concentrations may cause
central nervous system depression, narcosis and unconsciousness.
May cause kidney, liver and lung damage.
Skin: May cause irritation with redness, itching and pain. Cyclohexanone
may be absorbed through the skin causing effects similar to those
listed under inhalation.
Eye: Vapors may cause irritation. Direct contact may cause irritation
with redness, stinging and tearing of the eyes. May cause eye
damage.
Ingestion: Swallowing may cause abdominal pain, nausea, vomiting and
diarrhea. Aspiration during swallowing or vomiting can cause
chemical pneumonia and lung damage. May cause kidney and liver
damage.
Chronic Prolonged or repeated overexposure cause dermatitis and damage
Toxicity: to the kidney, liver, lungs and central nervous system.
Toxicity Data: Acetone: Oral rat LD50: 5,800 mg/kg
Inhalation rat LC50: 50,100 mg/m3/8 hours
Cyclohexanone: Oral rat LD50: 1,620 mg/kg
Inhalation rat LC50: 8,000 ppm/4 hours
Skin rabbit LD50: 1 mL/kg
Tetrahydrofuran: Oral rat LD50: 1,650 mg/kg
Inhalation rat LC50: 21,000 ppm/3 hours
Methyl Ethyl Ketone: Oral rat LD50: 2,737mg/kg
Inhalation rat LC50: 23,500mg/m3/8 hours
Skin rabbit LD50: 6,480 mg/kg

SECTION 11 (Continued)

Sensitization: None of the components are known to cause sensitization.
Carcinogenicity: None of the components are listed as a carcinogen or suspect carcinogen by NTP, IARC or OSHA. The National Toxicology Program has reported that exposure of mice and rats to tetrahydrofuran (THF) vapor levels up to 1800 ppm 6 hr/day, 5 days/week for their lifetime caused an increased incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these findings for human health is unclear at this time, and may be related to "species specific" effects. Elevated incidences of tumors in humans have not been reported for THF. ACGIH has classified cyclohexanone (CYH) and tetrahydrofuran as "A3," Confirmed Animal Carcinogens with Unknown Relevance to Humans.
Mutagenicity: Cyclohexanone has been positive in bacterial and mammalian assays. Acetone, methyl ethyl ketone and tetrahydrofuran are generally thought not to be mutagenic.
Reproductive Toxicity: Cyclohexanone and methyl ethyl ketone have been shown to cause embryofetal toxicity and birth defects in laboratory animals. Acetone and tetrahydrofuran have been found to cause adverse developmental effects only when exposure levels cause other toxic effects to the mother.
Medical Conditions Aggravated By Exposure: Persons with pre-existing skin, lung, kidney or liver disorders may be at increased risk from exposure to this product.

SECTION 12 **ECOLOGICAL INFORMATION**

This product is not expected to be toxic to aquatic organisms.
Cyclohexanone: 96 hour LC50 values for fish is over 100 mg/l.
Tetrahydrofuran: 96 hour LC50 fathead minnow: 2160 mg/L.
Methyl Ethyl Ketone: 96 hour LC50 for fish is greater than 100 mg/L.
Acetone: 96 hour LC50 for fish is greater than 100 mg/L.
VOC Information: This product emits VOC's (volatile organic compounds) in its use. Make sure that use of this product complies with local VOC emission regulations, where they exist.
VOC Level: 600 g/l per SCAQMD Test Method 316A.

SECTION 13 **DISPOSAL CONSIDERATIONS**

Waste Disposal: Dispose in accordance with current local, state and federal regulations.
RCRA Hazardous Waste Number: U002, U057, U159, U213
EPA Hazardous Waste ID Number: D001, D035, F003, F005
EPA Hazard Waste Class: Ignitable Waste. Toxic Waste (Methyl Ethyl Ketone content)

SECTION 14 TRANSPORT INFORMATION

DOT	<u>Less than 1 Liter (0.3 gal)</u>	<u>Greater than 1 Liter (0.3 gal)</u>
Proper Shipping Name:	Consumer Commodity	Adhesives
Hazard Class/Packing Group:	ORM-D	3, PGII
UN/NA Number:	None	UN1133
Hazard Labels:	None	Flammable Liquid

IMDG

Proper Shipping Name:	Adhesives	Adhesives
Hazard Class/Packing Group:	3, II	3, II
UN Number:	UN1133	UN1133
Label:	None (Limited Quantities are excepted from labeling)	Class 3 (Flammable Liquid)

2004 North American Emergency Response Guidebook Number: 127 or 128

SECTION 15 REGULATORY INFORMATION

Hazard Category for Section 311/312: Acute Health, Chronic Health, Flammable

Section 302 Extremely Hazardous Substances (TPQ): This product does not contain chemicals regulated under SARA Section 302.

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

<u>Chemical</u>	<u>CAS #</u>	<u>% by wt.</u>
Methyl Ethyl Ketone	78-93-3	10-30%

CERCLA 103 Reportable Quantity: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Tetrahydrofuran (65% maximum) of 1,000 lbs, is 1,538 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65: This product contains trace amounts of chemicals known to the State of to cause cancer. Under normal Use conditions, exposure to these chemicals at levels above the State of California "No Significant Risk Level" (NSRL) are unlikely. Oatey strongly encourages the use of proper personal protective equipment (PPE) and ventilation guidelines noted in Section 8 to minimize exposure to these chemicals.

TSCA Inventory: All of the components of this product are listed on the TSCA inventory.

Canadian WHIMS Classification: Class B, Division 2; Class D, Division 2, Subdivision B. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16

NFPA and HMIS:

NFPA Hazard Signal:	Health: 2	Flammability: 3	Reactivity: 1	Special: None
HMIS Hazard Signal:	Health: 2*	Flammability: 3	Reactivity: 1	PPE: G

Disclaimer:
The information herein has been compiled from sources believed to be reliable, up-to-date, and is accurate to the best of our knowledge. However, Oatey cannot give any guarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.

M A T E R I A L S A F E T Y D A T A S H E E T

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

THIS MSDS IS OFFERED IN CANADIAN-FRENCH UPON REQUEST.

ON PEUT DEMANDER CETTE MSDS A LA LANGUE FRANCAISE-CANADIENNE.

PRODUCT NAME : QUICK PLUG HYDRAULIC CEMENT
 UPC NUMBER : 7079814084, 7079814086, 7079814090, 7079814095,
 7079810050, 7079810060, 7079810070, 7079810080
 PRODUCT USE/CLASS : Hydraulic Cement

MANUFACTURER:
 DAP INC. DAP CANADA CORP.
 2400 BOSTON STREET 475 FINCHDENE SQUARE UNIT 5
 BALTIMORE, MD 21224 SCARBOROUGH, ONTARIO M1X 1B7

24 HOUR EMERGENCY:
 TRANSPORTATION: 1-800-535-5053 (352-323-3500)
 MEDICAL : 1-800-327-3874 (513-558-5111)

PREPARE DATE: 11/1/1999 GENERAL INFORMATION:
 REVISION NO.: 3 DAP INC. : 1-888-DAP-TIPS (1-888-327-8477)
 REVISION DATE: 12/30/2004

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

			WT/WT %
01	Hydrated Lime	39445-23-3	1.0-5.0 %
02	Portland cement	65997-15-1	40.0-50.0 %
03	Fused calcium aluminate	65997-16-2	20.0-30.0 %
04	Crystalline silica	14808-60-7	20.0-30.0 %
05	Calcium sulfate	7778-18-9	1.0- 5.0 %

----- EXPOSURE LIMITS -----

ITEM	ACGIH		OSHA		COMPANY	SKIN
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	TLV-TWA	
01	5 mg/m3	N.E.	5 mg/m3	N.E.	N.E.	NO
02	10 mg/m3dust	N.E.	10 mg/m3dust	N.E.	N.E.	NO
03	10 mg/m3	N.E.	N.E.	N.E.	N.E.	NO
04	0.05 mg/m3*	N.E.	10 mg/m3dust	N.E.	N.E.	NO
05	10 mg/m3	N.E.	5 mg/m3dust	N.E.	N.E.	NO

(See Section 16 for abbreviation legend)

The 2001 ACGIH Threshold Limit Values for Chemical Substances and Physical Agents lists the median Respirable Particulate Mass (RPM) point for crystalline silica at 4.0 microns in terms of the particle's aerodynamic diameter.

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Listed Permissible Exposure Levels (PEL) are from the U.S. Dept. of Labor OSHA Final Rule Limits (CFR 29 1910.1000); limits may vary between states.

Remaining ingredients are not considered hazardous per the OSHA Hazard Communication Standard.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: WARNING! Injurious to eyes. Causes skin irritation. Exposure to dust may result in build-up of material in eyes, ears, nose, and mouth which may cause irritation.

POTENTIAL HEALTH EFFECTS:

EFFECTS OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Wet cement can dry skin and cause alkali burns.

EFFECTS OF OVEREXPOSURE - INHALATION: Exposure to dust may cause irritation to nose, throat, and respiratory system.

EFFECTS OF OVEREXPOSURE - INGESTION: Irritating to mouth, throat and stomach. Ingestion may result in obstruction when wetted material hardens.

EFFECTS OF OVER EXPOSURE - CHRONIC HAZARDS

The International Agency for Research on Cancer (IARC) has determined that crystalline silica in the form of quartz or cristobalite that is inhaled from occupational sources is carcinogenic to humans (Group 1- carcinogenic to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (published in June 1997) in conjunction with the use of these materials. The National Toxicology Program (NTP) classifies respirable crystalline silica as known to be a human carcinogen. Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (A2).

Breathing dust containing respirable crystalline silica may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may have the following serious chronic health effects: Excessive inhalation of respirable dust can cause pneumoconiosis, a respiratory disease, which can result in delayed, progressive, disabling and sometimes fatal lung injury. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. Smoking exacerbates this disease. Individuals with pneumoconiosis are predisposed to develop tuberculosis. There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints

(Continued on Page 3)

SECTION 3 - HAZARDS IDENTIFICATION

such as scleroderma (an immune system disorder manifested by fibrosis of the lungs, skin and other internal organs) and kidney disease.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED BY CONTACT: Asthma and asthma-like conditions may worsen from prolonged and repeated exposure.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT INHALATION

SECTION 4 - FIRST AID MEASURES

EYE CONTACT: Flush with large quantities of water until irritation subsides. Contact a physician.

SKIN CONTACT: Wash with soap and water. If irritation of skin persists, contact a physician.

INHALATION: Remove to fresh air. Contact a physician immediately.

INGESTION: DO NOT INDUCE VOMITING. Contact a physician or Regional Poison Control Center immediately.

COMMENTS: Call 1-800-327-3874 if irritation or complications arise from any of the above exposures.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: N.A.

LOWER EXPLOSIVE LIMIT: N.A.

UPPER EXPLOSIVE LIMIT: N.A.

AUTOIGNITION TEMPERATURE: N.E.

EXTINGUISHING MEDIA: CO2 DRY CHEMICAL FOAM

UNUSUAL FIRE AND EXPLOSION HAZARDS: Material will not burn.

SPECIAL FIREFIGHTING PROCEDURES: None.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: Sweep up excess powder. Place remaining powder into containers.

SECTION 7 - HANDLING AND STORAGE

(Continued on Page 4)

SECTION 7 - HANDLING AND STORAGE

HANDLING INFORMATION: KEEP OUT OF REACH OF CHILDREN. Keep containers away from excessive heating and freezing. Avoid skin and eye contact. Do not inhale dusts of this product.

STORAGE INFORMATION: Keep container closed when not in use.

OTHER PRECAUTIONS: None.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: If dry-sanding, provide sufficient mechanical ventilation to maintain exposure below PEL and TLV. While mixing, provide sufficient mechanical ventilation (local or general exhaust) to maintain exposure below PEL and TLV.

Dry sanding of dried product results in the generation of dust which contains crystalline silica. Avoid exposure to dust by wearing an appropriate, properly fitted, dust respirator during dry sanding. Follow respiratory manufacturer's directions for respirator use.

If the 8 hour exposure limit or value is exceeded for any component, use an approved NIOSH/OSHA respirator. Consult your safety equipment supplier and the OSHA regulation, 29 CFR 1910.134 for respirator requirements. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

The National Institute for Occupational Safety and Health (NIOSH) recommended permissible exposure limit of 50 micrograms respirable free silica per cubic meter of air (0.05 mg/m³) as determined by a full shift sample up to 10 hour working day, 40 hours per week.

EYE PROTECTION: Goggles or safety glasses with side shields.

SKIN PROTECTION: Rubber gloves.

OTHER PROTECTIVE EQUIPMENT: Provide eyewash and coveralls if body contact may occur.

HYGIENIC PRACTICES: Remove contaminated clothing and wash before reuse. Follow all MSDS/label precautions even after container is emptied because they may retain product residues.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE : N.A. VAPOR DENSITY : N.A.

(Continued on Page 5)

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

ODOR : Low odor
APPEARANCE : Gray powder EVAPORATION RATE: N.A.
SOLUBILITY IN H2O : Dispersible
SPECIFIC GRAVITY : 2.9
VAPOR PRESSURE : N.A.
PHYSICAL STATE : Powder

(See Section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Excessive heat and freezing.

INCOMPATIBILITY: Strong oxidizers and caustics.

HAZARDOUS DECOMPOSITION PRODUCTS: Normal decomposition products, i.e. CO_x, NO_x

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

No product or component toxicological information is available.

SECTION 12 - ECOLOGICAL INFORMATION

No Information Available.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE MANAGEMENT/DISPOSAL: Dispose of according to Federal, State, and Local Standards. This product does not meet the definition of a hazardous waste according to U.S. EPA Hazardous Waste Management Regulations, 40 CFR Section 261. Do not reuse empty containers. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

EPA WASTE CODE - If discarded (40 CFR 261): None.

(Continued on Page 6)

SECTION 13 - DISPOSAL CONSIDERATIONS

SECTION 14 - TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Not Regulated by D.O.T.

DOT HAZARD CLASS: NONE

DOT UN/NA NUMBER: NONE PACKING GROUP: NONE

Note: The shipping information provided is applicable for domestic ground transport only. Different categorization may apply if shipped via other modes of transportation and/or to non-domestic destinations.

SECTION 15 - REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS -

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

None

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None.

NEW JERSEY RIGHT-TO-KNOW:

The following materials are non-hazardous, but are among the top five components in this product:

----- CHEMICAL NAME ----- CAS NUMBER

No non-hazardous ingredients are to be reported.

PENNSYLVANIA RIGHT-TO-KNOW:

The following non-hazardous ingredients are present in the product at greater than 3%:

----- CHEMICAL NAME ----- CAS NUMBER

No non-hazardous ingredients are present at greater than 3%.

SECTION 15 - REGULATORY INFORMATION

CALIFORNIA PROPOSITION 65:

WARNING: The chemical(s) noted below and contained in this product, are known to the state of California to cause cancer:

CHEMICAL NAME	CAS NUMBER
Quartz Crystalline Silica	14808-60-7

INTERNATIONAL REGULATIONS: AS FOLLOWS -

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: Not regulated.

SECTION 16 - OTHER INFORMATION

HMIS RATINGS - HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 09/12/2002

VOC less water, less exempt solvent: 0 g/L
VOC material : 0 g/L

- LEGEND: ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
- N.A. - NOT APPLICABLE
- N.E. - NOT ESTABLISHED
- PEL - PERMISSIBLE EXPOSURE LIMIT
- NTP - NATIONAL TOXICOLOGY PROGRAM
- SARA - SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986
- STEL - SHORT TERM EXPOSURE LIMIT
- TLV - THRESHOLD LIMIT VALUE (8 HR. TIME WEIGHTED AVERAGE OR TWA)
- VOC - VOLATILE ORGANIC COMPOUND
- NJRTK - NEW JERSEY RIGHT TO KNOW LAW
- N.D. - NOT DETERMINED

MSDS# 79705

(Continued on Page 8)

SECTION 16 - OTHER INFORMATION

This data is offered in good faith as typical values and not as a product specification. No warranty either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review the recommendations in specific context of the intended use and determine if they are appropriate.

< End OF MSDS >

F I C H E S I G N A L É T I Q U E

SECTION 1 - IDENTIFICATION DU PRODUIT ET DE LA COMPAGNIE

CETTE FICHE SIGNALÉTIQUE EST DISPONIBLE EN ANGLAIS SUR DEMANDE.

THIS MSDS IS OFFERED IN ENGLISH UPON REQUEST

NOM DU PRODUIT : CIMENT HYDRAULIQUE QUICK PLUG
 NUMÉRO UPC : 7079814084, 7079814086, 7079814090, 7079814095,
 7079810050, 7079810060, 7079810070, 7079810080.
 UTILISATION DU PRODUIT : Ciment hydraulique

FABRIQUÉ PAR :
 DAP INC. DAP CANADA CORP.
 2400 BOSTON STREET 475 FINCHDENE SQUARE
 BALTIMORE, MARYLAND, USA UNIT 5
 MD 21224 SCARBOROUGH, ONTARIO M1X 1B7

URGENCE 24 HEURES :
 TRANSPORT : 1-800-535-5053 (352-323-3500)
 MÉDICALE : 1-800-327-3874 (513-558-5111)

DATE DE PRÉPARATION : 1^{er} novembre 1999 INFORMATION GÉNÉRALE :
 N° DE RÉVISION : 3 DAP INC. : 1-888-DAP-TIPS
 DATE DE RÉVISION : 30 Décembre 2004 (1-888-327-8477)

SECTION 2 - COMPOSITION/INGRÉDIENTS DANGEREUX

ITEM	NOM CHIMIQUE	N° de CAS	PLAGE % POIDS
01	Chaux hydratée	39445-23-3	1,0-5,0 %
02	Ciment Portland	65997-15-1	40,0-50,0 %
03	Aluminate de calcium fondu	65997-16-2	20,0-30,0 %
04	Silice cristalline, quartz	14808-60-7	20,0-30,0 %
05	Sulfate de calcium	7778-18-9	1,0-5,0 %

LIMITES D'EXPOSITION

ITEM	ACGIH		OSHA		COMPAGNIE	
	LTV-EMPT	LTV-LECT	LEP-EMPT	LEP-PLAFOND	LTV-EMPT	PEAU
01	5 mg/m ³	N.É.	5 mg/m ³	N.É.	N.É.	NON
02	10 mg/m ³	N.É.	10 mg/m ³ en poussière	N.É.	N.É.	NON
03	10 mg/m ³	N.É.	N.É.	N.É.	N.É.	NON
04	0,05 mg/m ³ *	N.É.	10 mg/m ³ en poussière	N.É.	N.É.	NON
05	10 mg/m ³	N.É.	5 mg/m ³ en poussière	N.É.	N.É.	NON

(Consulter la légende des abréviations à la Section 16)

* Selon la liste ACGIH 2001 concernant les valeurs limites maximales des substances chimiques et des agents physiques, la masse particulière respirable (MPR) est de 4,0 microns de diamètre pour chaque particule aérodynamique de silice cristalline.

(Suite à la page 2)

SECTION 2 - COMPOSITION/INGRÉDIENTS DANGEREUX

Les autres ingrédients ne sont pas considérés dangereux selon les normes sur la communication de renseignements à l'égard des matières dangereuses de l'OSHA.

Les limites d'exposition permises (LEP) décrites proviennent du Ministère du Travail des États-Unis, règlement final concernant les limites OSHA (CFR 29 1910.1000); les limites peuvent varier selon les États.

SECTION 3 - IDENTIFICATION DES DANGERS

URGENCES GÉNÉRALES : Peut causer de graves lésions aux yeux. Peut causer une irritation de la peau. L'exposition à la poussière peut provoquer des accumulations de matériau dans les yeux, les oreilles, le nez et la bouche qui peuvent causer des irritations.

EFFETS POTENTIELS SUR LA SANTÉ :

EFFETS DE SUREXPOSITION - CONTACT OCULAIRE : Peut causer une irritation des yeux.

EFFETS DE SUREXPOSITION - CONTACT CUTANÉ : Le ciment humide peut causer un assèchement de la peau et des brûlures d'alcalis.

EFFETS DE SUREXPOSITION - INHALATION : L'exposition à la poussière peut causer une irritation du nez, de la gorge et des voies respiratoires.

EFFETS DE SUREXPOSITION - INGESTION : Peut causer une irritation de la bouche, de la gorge et de l'estomac. L'ingestion peut causer une obstruction du système gastro-intestinal lorsque le matériau humide durci.

EFFETS DE SUREXPOSITION - DANGERS CHRONIQUES : L'Agence internationale de recherches sur le cancer (AIRC) a démontré que la silice cristalline, sous forme de quartz ou de cristobalite, qui est inhalée en milieu de travail est cancérigène pour les humains (Groupe 1 - Cancérigène pour les humains). Consulter le Monographe 68 de l'AIRC, Silice, certains silicates et fibres organiques (publié en juin 1997) concernant l'utilisation de ces matériaux. Le Programme National de Toxicologie (PNT) classe la silice cristalline respirée parmi les produits cancérigènes. Consulter le 9^e Rapport sur les produits cancérigènes (2000). La Conférence américaine des hygiénistes industriels gouvernementaux (CAHIG) classe la silice cristalline, quartz, comme potentiellement cancérigène pour les humains (A2).

Respirer de la poussière contenant de la silice cristalline respirable peut causer des lésions sérieuses ou des maladies pouvant aller jusqu'à des dommages permanents aux poumons. L'inhalation de ces poussières peut constituer un danger de maladie chronique : l'inhalation excessive de ces poussières respirables peut causer une pneumoconiose, des maladies respiratoires qui peuvent résulter à plus ou moins long terme en une maladie dégénérative progressive des poumons qui peut être mortelle. Les symptômes sont : Toux, respiration rapide, sifflements, troubles de la poitrine difficilement identifiables et une réduction de la capacité pulmonaire. Le fait de fumer accentue dramatiquement cette maladie. Les personnes atteintes de pneumoconiose sont prédisposées à développer la tuberculose. Certaines évidences démontrent que respirer de la silice cristalline respirable ou la silicose est associé avec un accroissement

(Suite à la page 3)

SECTION 3 - IDENTIFICATION DES DANGERS

significatif du taux de maladies mortelles telles que la sclérodermie (une manifestation du désordre du système immunitaire par une fibrose des poumons, de la peau et des autres organes internes) et de maladies rénales.

PROBLÈMES MÉDICAUX AGGRAVÉS AU CONTACT DU PRODUIT : Une exposition excessive et répétée peut aggraver l'état des personnes souffrant d'asthme ou de conditions semblables à l'asthme.

VOIE(S) D'ABSORPTION : CONTACT CUTANÉ ET INHALATION.

SECTION 4 - PREMIERS SOINS

CONTACT OCULAIRE : Rincer à grande eau durant au moins 15 minutes ou jusqu'à ce que l'irritation disparaisse. Consulter un médecin immédiatement.

CONTACT CUTANÉ : Nettoyer avec de l'eau et du savon. Si l'irritation persiste, consulter un médecin.

INHALATION : Amener à l'air frais. Consulter un médecin immédiatement.

INGESTION : NE PAS FAIRE VOMIR. Consulter un médecin ou le Centre antipoison le plus près immédiatement.

COMMENTAIRES: Pour toute exposition significative, irritation, éruption et complication, communiquer avec le 1-800-327-3874.

SECTION 5 - MESURES DE PROTECTION EN CAS D'INCENDIE

POINT D'ÉCLAIR : N. Di. LIMITE D'EXPLOSIVITÉ INFÉRIEURE : N.Di.
LIMITE D'EXPLOSIVITÉ SUPÉRIEURE : N.Di.

TEMPÉRATURE D'AUTO-IGNITION : N.É.

MOYENS D'EXTINCTION : CO₂, PRODUITS CHIMIQUES SECS ET MOUSSE.

RISQUES PARTICULIERS D'EXPLOSION OU D'IGNITION : Ce matériau ne devrait pas brûler.

PROCÉDURES SPÉCIALES DE LUTTE CONTRE LES INCENDIES: Aucune.

SECTION 6 - MESURES EN CAS DE DÉVERSEMENT ACCIDENTEL

PROCÉDURES DE NETTOYAGE : Balayer l'excès de poudre. Déposer la poudre restante dans un contenant approprié à la mise aux rebuts.

SECTION 7 - MANUTENTION ET ENTREPOSAGE

PRÉCAUTIONS DE MANUTENTION : TENIR HORS DE PORTÉE DES ENFANTS. Maintenir le produit à l'écart de la chaleur et du froid excessif. Éviter tout contact avec la peau et les yeux. Ne pas inhaler les poussières de ce produit.

PRÉCAUTIONS D'ENTREPOSAGE : Maintenir les contenants hermétiquement fermés.

PRÉCAUTIONS SUPPLÉMENTAIRES : Aucune.

SECTION 8 - CONTRÔLES D'EXPOSITION/ PROTECTION PERSONNELLE

CONTRÔLES D'INGÉNIERIE: Lors de sablage à sec, procurer une ventilation adéquate afin de maintenir le niveau de concentration des poussières sous la limite d'exposition permise ou sous la limite tolérable d'exposition. Durant le mélange, faire fonctionner au maximum le système de ventilation central et/ou le système d'évacuation local afin de maintenir le niveau de concentration des poussières sous la limite d'exposition permise ou sous la limite tolérable d'exposition.

Le sablage à sec génère une poussière contenant de la silice cristalline. Éviter toute exposition durant le sablage à sec en portant un respirateur anti-poussières, ajusté selon les recommandations du manufacturier. Consulter les recommandations du manufacturier pour connaître la façon appropriée d'utiliser le respirateur.

PROTECTION DES VOIES RESPIRATOIRES : Si la limite ou la valeur d'exposition pondérée pour 8 heures risque d'être excédée par rapport à un ou plusieurs des ingrédients, porter un respirateur autonome approuvé NIOSH. Consulter les informations de sécurité fournies par le fabricant et les normes de l'OSHA selon le règlement, 29 CFR 1910.134 concernant le port des respirateurs. Tout respirateur autonome, peu importe le lieu de travail, doit être utilisé selon les normes de l'OSHA 1910.134 et de l'ANSI Z88.2.

PROTECTION DES YEUX : Porter des lunettes étanches ou des lunettes de sécurité munies de boucliers latéraux.

PROTECTION DE LA PEAU: Porter des gants de caoutchouc.

ÉQUIPEMENT DE PROTECTION SUPPLÉMENTAIRE : S'assurer d'avoir une fontaine oculaire à portée de main. Procurer un habit de protection imperméable si un contact cutané est possible.

PRATIQUES HYGIÉNIQUES : Enlever les vêtements contaminés et les laver avant de les reporter. Lire attentivement et appliquer toutes les mesures de précaution recommandées dans la fiche signalétique et sur l'étiquette même lorsque les contenants sont vides parce qu'ils peuvent contenir des résidus dangereux.

SECTION 9 - PROPRIÉTÉS PHYSIQUES ET CHIMIQUES

POINT D'ÉBULLITION : N.Di.
DENSITÉ DE VAPEURS : N.Di.

SECTION 9 - PROPRIÉTÉS PHYSIQUES ET CHIMIQUES

ODEUR : Faible odeur
APPARENCE : Poudre grise
TAUX D'ÉVAPORATION : Non disponible
SOLUBILITÉ DANS L'EAU : Se disperse au contact de l'eau
POIDS SPÉCIFIQUE : 2,9
PRESSION DE VAPEUR : Non disponible
ÉTAT PHYSIQUE : Poudre

(Consulter la légende des abréviations à la Section 16)

SECTION 10 - STABILITÉ ET RÉACTIVITÉ

CONDITIONS À ÉVITER : Chaleur ou froid excessif.

INCOMPATIBILITÉ : Agents oxydants et produits caustiques puissants.

PRODUITS DE DÉCOMPOSITION DANGEREUX : Produits de décomposition habituels, exemples : oxydes de carbone et oxydes d'azote.

POLYMÉRISATION DANGEREUSE : Ne devrait pas se produire dans des conditions normales d'utilisation.

STABILITÉ : Ce produit est stable dans des conditions normales d'entreposage.

SECTION 11 - PROPRIÉTÉS TOXICOLOGIQUES

Aucune information n'est disponible concernant les propriétés toxicologiques de ce produit ou de ses ingrédients.

SECTION 12 - INFORMATION ÉCOLOGIQUE

Aucune information n'est disponible.

SECTION 13 - MISE AUX REBUTS

MISE AUX REBUTS : Suivre les lois fédérales, provinciales et municipales pour disposer du produit. Ce produit n'est pas considéré dangereux selon les normes définies par la loi sur les déchets dangereux de l'EPA des États-Unis, 40 CFR section 261. Les lois provinciales et municipales sont complexes et peuvent varier de celles du fédéral. La responsabilité d'une disposition appropriée du produit incombe au propriétaire du produit.

CODE DE MISE AUX REBUTS DE L'AGENCE DE PROTECTION DE L'ENVIRONNEMENT - Si disposé (40 CFR 261): Aucun.

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SECTION 14 - ÉTIQUETTAGE SELON LE MINISTÈRE DES TRANSPORTS

NOM PERTINENT D'EXPÉDITION : Non réglementé par le Ministère des transports

CLASSE DE DANGER : Aucune

NUMÉRO UN/NA : Aucun GROUPE D'EMPAQUETAGE : Aucun

Note : Les informations fournies concernant le transport s'appliquent uniquement au transport domestique. Une catégorisation différente peut s'appliquer selon le mode de transport utilisé et/ou la destination particulière désignée.

SECTION 15 - INFORMATION SUR LES RÈGLEMENTS

RÈGLEMENTS FÉDÉRAUX DES ÉTATS-UNIS : VOIR CI-DESSOUS -

OSHA: Produits dangereux défini selon les normes sur la communication de renseignements à l'égard des matières dangereuses de l'OSHA (29 CFR 1910.1200).

SARA SECTION 313 :

Ce produit contient les substances suivantes assujetties aux normes de déclaration de la Section 313, du Titre III de la Superfund Amendments and Reauthorization Act de 1986 et du 40 CFR Partie 372 :

Aucune substance n'est à déclarer selon la Section 313 du SARA.

LOI SUR LE CONTRÔLE DES SUBSTANCES TOXIQUES :

Ce produit contient les substances chimiques suivantes à déclarer selon les normes TSCA 12(B) si exporté à l'extérieur des États-Unis :

Aucune

Tous les ingrédients sont listés dans l'inventaire de TSCA.

NEW JERSEY RIGHT-TO-KNOW :

Les substances suivantes sont non-dangereuses mais sont comptées parmi les 5 principaux ingrédients composant ce produit :

----- NOM CHIMIQUE -----	N° de CAS
Aucune substance dangereuse n'est à déclarer.	

PENNSYLVANIA RIGHT-TO-KNOW :

Les substances suivantes sont non-dangereuses mais sont présentes à plus de 3% dans ce produit :

----- NOM CHIMIQUE -----	N° de CAS
Aucune substance dangereuse n'est présente à plus de 3%.	

PROPOSITION 65 DE CALIFORNIE :

AVERTISSEMENT! Les produits chimiques listés ci-dessous et contenus dans ce produit sont reconnus par l'État de la Californie pour causer le cancer, des malformations congénitales ou des lésions aux organes reproducteurs :

----- NOM CHIMIQUE -----	N° de CAS
Silice cristalline, quartz	14808-60-7

SECTION 15 - INFORMATION SUR LES RÈGLEMENTS

RÈGLEMENTS INTERNATIONAUX : VOIR CI-DESSOUS -

SIMDUT CANADIEN : Cette fiche signalétique a été préparée selon les règlements concernant les substances contrôlées à l'exception des 16 entêtes de section.

CLASSE SELON LE SIMDUT CANADIEN : Non réglementé.

SECTION 16 - INFORMATIONS SUPPLÉMENTAIRES

Classification des dangers - SANTÉ : 1 INFLAMMABILITÉ: 0 RÉACTIVITÉ: 0

DATE DE RÉVISION PRÉCÉDENTE : 12 septembre 2002

Composé organique volatil exempt d'eau et de solvant : 0 g/L
Composé organique volatil du matériau : 0 g/L

LÉGENDE : ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
S.O. - SANS OBJET
N.É. - NON ÉTABLI
LEP - LIMITE D'EXPOSITION PERMISE
PNT - PROGRAMME NATIONAL DE TOXICOLOGIE
SARA - SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986
LECT - LIMITE D'EXPOSITION À COURT TERME
LTV - LIMITE TOLÉRABLE D'EXPOSITION (8 H EMPT)
EMPT - EXPOSITION MOYENNE PONDÉRÉE EN FONCTION DU TEMPS
COV - COMPOSÉ ORGANIQUE VOLATIL
NJRTK - NEW JERSEY RIGHT TO KNOW LAW
N.D. - NON DÉTERMINÉ
N.Di. - NON DISPONIBLE

FS # 79705

Ces données sont offertes en toute bonne foi et représente des valeurs standard sans toutefois être des spécifications du produit. Aucune garantie n'est expressément ou implicitement offerte. Les recommandations pour les procédures d'hygiène industrielle et de sécurité sont généralement reconnues pour être applicables. Toutefois, chaque utilisateur doit revoir les recommandations selon le contexte spécifique de l'utilisation et déterminer si ces procédures sont appropriées.

< Fin de la FICHE SIGNALÉTIQUE >



MATERIAL SAFETY DATA SHEET

Olin MSDS No.: 00055.0001	Revision Date: 1/1/13
Revision No.: 20	Supersedes: 7/26/12

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: CARTRIDGES FOR POWER DEVICES
Chemical Name: Mixture – Metal Alloy
Synonyms: Centerfire Powertool Loaded Round, Rimfire Cartridge for Power Device, 22, 25, 27, 32, 38 Caliber Powertool Round, Power Load, Blank Power Load and/or Booster, Powder Load
Chemical Family: Metal mixture
Formula: Not applicable - mixture
Product Use/ Description: Centerfire Powertool Loaded Round

COMPANY ADDRESS MSDS Control Group Olin Brass and Winchester, Inc. 427 North Shamrock St. East Alton, IL 62024-1197 www.winchester.com	TECHNICAL INFORMATION: 618-258-3507	EMERGENCY TELEPHONE NUMBER: US/Canada: 1-800-424-9300 Outside US/Canada: 703-527-3887 Customer #: ccn24728
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2. COMPOSITION / INFORMATION ON INGREDIENTS

CAS Number	Components	% By Weight	EINECS/ ELINCS #	EU Classification	
				Symbol	R-Phrase
7439-89-6	Iron	0 – 97	231-096-4	None	None
7440-50-8	Copper	50 - 65	231-159-6	None	None
7440-66-6	Zinc	15 - 32	231-175-3	F (as dust or powder)	R 15-17
9004-70-0	Nitrocellulose	7 - 13	Not listed	E*	R 1-3
55-63-0	Nitroglycerin	0.5 - 2	200-240-8	E, T+, N	R 3-26/27/28-33-51-53
15245-44-0	Normal Lead styphnate	0.1 - 1	239-290-0	E, T, N	R61-3-20/22-33-50/53-62

*This material is not listed in Annex 1 of Directive 88/379/EEC. Olin has classified the material according to the conventional method based upon information from similar materials.

OSHA REGULATORY STATUS: Explosive

3. HAZARDS IDENTIFICATION

CAUTION!

EXPLOSIVE. KEEP AWAY FROM HEAT. DO NOT SUBJECT TO MECHANICAL SHOCK. PARTICLES FROM FIRING MAY BE HARMFUL IF INHALED. DO NOT TAKE INTERNALLY.

<u>HAZARD RATINGS (for dust or fume)</u> <u>Hazardous Materials Identification System (HMIS)</u>	Degree of hazard (0 = low, 4 = extreme) Health: 0 Flammability: 0	Physical Hazard: Explosive: 2
<u>National Fire Protection Association (NFPA)</u>	Mixture. Not rated.	
<u>HUMAN THRESHOLD RESPONSE DATA</u>		
<u>Odor Threshold:</u>	Unknown	
<u>Irritation Threshold:</u>	Unknown	
<u>Immediately Dangerous to Life or Health (IDLH) Value(s):</u>	The IDLH for this product is not known. The IDLH for copper and lead is 100 mg/m ³ . The IDLH for nitroglycerin is 75 mg/m ³ .	

POTENTIAL HEALTH EFFECTS

This product is composed of a finished metal alloy cartridge which contains the various components completely sealed within. Therefore, under normal handling of this product, no exposure to any harmful materials will occur.

When the product is fired, a small amount of particles may be generated which may be slightly irritating to the eyes and the respiratory tract. The particles may contain trace amounts of these harmful substances:

Copper: Inhalation of high concentrations of metallic copper dusts or fumes may cause nasal irritation and/or nausea, vomiting and stomach pain.

Nitroglycerin: Will produce dilation of blood vessels and drop in blood pressure which may affect the heart. It has also been shown to cause methemoglobinemia (cyanosis).

Lead: Ingestion of large amounts of lead can cause abdominal pain, constipation, cramps, nausea and/or vomiting. Chronic exposure to lead can cause kidney damage, anemia, reproductive effects, developmental effects and permanent nervous system damage in humans including changes in cognitive function.

It is unlikely that the amount of particles that someone would be exposed to from firing would be sufficient to cause any of these effects.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: There are no medical conditions known to be aggravated by exposure to this product in its solid form. Exposure to lead can aggravate anemia, cardiovascular and respiratory disease.

POTENTIAL ENVIRONMENTAL EFFECTS: Product has not been tested for environmental properties. Nitroglycerin and lead have been shown to be toxic to aquatic species.

4. FIRST AID MEASURES

- EYE CONTACT: Immediately flush out fume or particles with large amounts of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If eye irritation develops, call a physician at once.
- SKIN CONTACT: Wash skin with plenty of soap and water.
- INHALATION: If symptoms of lung irritation occur (coughing, wheezing or breathing difficulty), remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep affected person warm and at rest. Get medical attention.
- INGESTION: If ingested, immediately call a physician.

5. FIRE FIGHTING MEASURES

PROPERTY	VALUE	PROPERTY	VALUE
Explosive	Yes	Flammable	Not applicable
Combustible	Not applicable	Pyrophoric	No
Flash Point (°C):	Not applicable	Burning Rate of Material:	Not applicable
Lower Explosive Limit:	Not applicable	Autoignition Temp.:	No data
Upper Explosive Limit:	Not applicable	Flammability Classification: (defined by 29 CFR 1910.1200)	Explosive

UNUSUAL FIRE AND EXPLOSION HAZARDS: If fire reaches cargo, do not fight. Evacuate all persons, including emergency responders from the area for 1500 feet (1/3 mile) in all directions.

EXTINGUISHING MEDIA: Flood area with water. If no water is available, carbon dioxide, dry chemical or earth may be used. If the fire reaches the cargo, withdraw and let fire burn.

SPECIAL FIREFIGHTING PROCEDURES: In case of fire, use normal fire fighting equipment. Protection concerns must also address the potential of the physical characteristic of this product as explosive.

6. ACCIDENTAL RELEASE MEASURES

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTREC AT 800-424-9300.

Spills of this material should be handled carefully. Do not subject materials to mechanical shock. A spill of this material will normally not require emergency response team capabilities. If, however, a large spill occurs, call 1-888-289-1911 for technical assistance.

7. HANDLING AND STORAGE

- HANDLING: No special requirements
- STORAGE: No special requirements
- Shelf Life Limitations*: Not known
- Incompatible Materials for Packaging*: None known
- Incompatible Materials for Storage or Transport*: Acids, Class A & B explosives, strong oxidizers, and caustics

CONDITIONS TO AVOID: Mechanical impact or shock and electrical discharge. Cartridges placed in a high radio frequency energy field (radar stations).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	CHEMICAL NAME	ACGIH TLV	OSHA PEL	INTERNATIONAL OELS
7440-50-8	Copper	0.2 mg/m ³ (fume), 1 mg/m ³ (dusts and mists)	0.1 mg/m ³ (fume) 1 mg/m ³ (dusts and mists)	Austria, Belgium, Canada: 0.2 mg/m ³ (fumes), 1 mg/m ³ (dusts) Denmark: 1.0 mg/m ³ (dust and powder) Germany (MAK): 0.1 mg/m ³ (fume), 1 mg/m ³ (dusts and mists)
7440-66-6	Zinc	None established	None established	None established
9004-70-0	Nitrocellulose	None established	None established	None established
55-63-0	Nitroglycerin	0.05 ppm (0.46 mg/m ³) Skin	Ceiling – 0.2 ppm (2 mg/m ³) Skin	Denmark: 0.02 ppm (0.2 mg/m ³) Norway, Sweden: 0.03 ppm (0.3 mg/m ³) Austria, Belgium, Germany, The Netherlands, Poland, Switzerland: 0.05 ppm (0.47 mg/m ³), skin Finland, France: 0.1 ppm (0.9 mg/m ³), skin U.K.: 0.2 ppm (2 mg/m ³), skin
15245-44-0	Lead styphnate	None established	None established	None established

ENGINEERING CONTROLS: Local exhaust ventilation is recommended if significant dusting occurs or fumes are generated. Otherwise, use general exhaust ventilation. Use explosion-proof ventilation. Use hearing protection.

EYE / FACE PROTECTION: Use safety glasses.

SKIN PROTECTION: Not normally needed

RESPIRATORY PROTECTION: Respiratory protection not normally needed.

GENERAL HYGIENE: Do not eat, drink, or smoke while using this product. Wash hands thoroughly after use.

9. PHYSICAL AND CHEMICAL PROPERTIES

PROPERTY	VALUE	PROPERTY	VALUE
Appearance:	Cylindrical brass cartridge	Vapor Density (air = 1):	Not applicable
Odor:	None	Boiling Point (°F):	Not applicable
Molecular Weight:	Not applicable - Mixture	Melting point:	Not applicable
Physical State:	Solid	Specific gravity (g/cc):	Not applicable
pH:	Not applicable	Bulk Density:	Not applicable
Vapor Pressure (mm Hg):	Not applicable	Viscosity (cps):	Not applicable
Vapor Density:	Not applicable	Decomposition Temperature:	Not applicable
Solubility in Water (20 °C):	Insoluble	Evaporation Rate:	Not applicable
Volatiles, Percent by volume:	Not applicable	Octanol/water partition coefficient:	Not applicable

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal temperatures and pressure.

MATERIALS TO AVOID: Acids, Class A & B explosives, strong oxidizers, and caustics

HAZARDOUS DECOMPOSITION PRODUCTS: Nitrogen oxides, carbon monoxide, lead oxides, carbon dioxide, lead dust/fume

HAZARDOUS POLYMERIZATION: Will not occur.

OTHER: Cartridge may detonate if case is punctured or severely damaged.

11. TOXICOLOGICAL INFORMATION

POTENTIAL EXPOSURE ROUTES: The physical nature of this product makes absorption from any route unlikely. A small amount of inhalable particles may be created when projectile is fired.

ACUTE ANIMAL TOXICITY DATA:

For Product:		For Components				
		Copper	Nitrocellulose	Lead styphnate	Nitroglycerin	Zinc
Oral LD ₅₀	Not applicable for product	3.5 mg/kg (mouse, intraperitoneal)	> 5 g/kg (rat)	No data	105 mg/kg (rat)	No data
Dermal LD ₅₀	Not applicable for product	375 mg/kg (rabbit, subcutaneous)	No data	No data	> 280 mg/kg (rabbit)	No data
Inhalation LC ₅₀	Not applicable for product. Particles generated from firing may be slightly toxic.	No data	No data	No data	No data	No data
Irritation	Not a skin or eye irritant as a loaded round.	Respiratory irritant	No data	No data	Mild eye and skin irritant	Eye irritant

SUBCHRONIC/ CHRONIC TOXICITY:
CARCINOGENICITY:

Lead has caused blood, kidney and nervous system damage in laboratory animals. The International Agency for Research on Cancer (IARC) lists lead as possibly carcinogenic to humans, group 2B.

MUTAGENICITY:

This product is not known or reported to be mutagenic. Lead has been shown to be mutagenic in several *in vitro* assays.

REPRODUCTIVE, TERATOGENICITY, OR DEVELOPMENTAL EFFECTS:

This product is not known or reported to cause reproductive or developmental effects. Lead has been shown to affect fetal development including birth defects and reduced male reproductive function in laboratory animals.

NEUROLOGICAL EFFECTS:

This product is not known or reported to cause neurological effects. Lead has caused peripheral and central nervous system damage and behavioral effects in laboratory animals.

INTERACTIONS WITH OTHER CHEMICALS WHICH ENHANCE TOXICITY:

None known or reported.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: No data is available on this product. Individual constituents are as follows:

Copper: The toxicity of copper to aquatic organisms varies significantly not only with the species, but also with the physical and chemical characteristics of the water, such as its temperature, hardness, turbidity and carbon dioxide content. Copper concentrations varying from 0.1 to 1.0 mg/l have been found by various investigators to be not toxic for most fish. However, concentrations of 0.015 to 3.0 mg/l have been reported as toxic, particularly in soft water to many kinds of fish, crustacea, mollusks, insects, and plankton.

Zinc: The following concentrations of zinc have been reported as lethal to fish:

- Rainbow trout fingerlings: 0.13 mg/l, 12 – 24 hours
- Bluegill sunfish: 6 hr TLM = 1.9 – 3.6 mg/l (soft water, 30°C)
- Rainbow trout: 4 mg/l (hard water) 3 days
- Sticklebacks: 1 mg/l (soft water) 24 hrs

The presence of copper appears to have a synergistic effect on the toxicity of zinc towards fish.

Nitrocellulose: LC₅₀ > 1000 mg/l (fish, invertebrates, algae)

Nitroglycerin: Bluegill, 96 hour LC₅₀ = 1.228 mg/l (static)

Lead: LC 50 (48 hrs.) to bluegill (*Lepomis macrochirus*) is reported to be 2-5 mg/l. Lead is toxic to waterfowl.

MOBILITY:

Dissolved lead from degraded bullets may migrate through soil.

PERSISTANCE/DEGRADABILITY: Not biodegradable. Bullets may fragment and decompose in soil leading to accumulation of lead.

BIOACCUMULATION:

No data

13. DISPOSAL CONSIDERATIONS

Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

14. TRANSPORT INFORMATION

	U.S. DOT	RID/ADR	IMDG	IATA	IMO	Canada TDG
PROPER SHIPPING NAME:	Cartridges, power device					
HAZARD CLASS:	1.4 S					
UN NO.:	UN 0323					
PACKING GROUP:	II					
HAZARD LABEL/PLACARD:	Explosive 1.4 S label is required unless packaged as ORM-D or Limited Quantity. 1.4S Placard must be applied in accordance with 49 CFR 172.504. Domestic air shipments of ORM-D and Limited Quantity must be marked ORM-D-AIR or Limited Quantity "Y".					
REPORTABLE QUANTITY:	Not applicable					
SPECIAL COMMENTS:	<p>LAND - See 49 CFR 173.63 for ORM-D or Limited Quantity Reclassification Limited Quantity is recognized for domestic transportation only until January 1, 2013. Limited Quantity is not authorized for international air shipment. ORM-D will no longer be valid for air shipment effective January 1, 2013, and no longer valid for any mode effective January 1, 2014.</p> <p>AIR - 25 KG. per package passenger aircraft 100 KG. Per package cargo aircraft.</p>					

15. REGULATORY INFORMATION

US FEDERAL

TSCA	The components of this product are listed on the Toxic Substance Control Act inventory.				
CERCLA:	Copper, R.Q.= 5000 lbs.; Zinc, R.Q. = 1000 lbs.; Nitroglycerin, R.Q. = 10 lbs. (No reporting is required if diameter of the pieces of metal is equal to or exceeds 100 micrometers (0.004 inches).				
SARA 313:	Copper, Zinc (fume or dust), Nitroglycerin, Lead and lead compounds				
SARA 313 Hazard Class:	<u>Health:</u>	Acute – No Chronic - No	<u>Fire:</u> No	<u>Reactivity:</u> None	<u>Release of Pressure:</u> Yes
SARA 302 EHS List:	None of the components of this product are listed.				

RQ = Reportable Quantity

STATE RIGHT-TO-KNOW STATUS

Component	*CA Prop. 65	New Jersey	Pennsylvania	Massachusetts	Michigan
Copper	Not listed	X	X	X	X
Zinc	Not listed	X	Not listed	X	X
Nitrocellulose	Not listed	X	X	X	Not listed
Nitroglycerin	Not listed	X	X	X	Not listed
Lead styphnate	X	Not listed	Not listed	X	Not listed

* "WARNING: This product contains detectable amounts of a chemical(s) known to the State of California to cause cancer and/or birth defects or other reproductive harm."

EUROPEAN REGULATIONS

Hazard Classification

Danger Symbol:	E	Explosive
Risk Phrases:	R2	Risk of explosion by shock, friction, fire or other sources of ignition
Safety Phrases:	S2	Keep out of reach of children.

German WGK Classification: Not known

CANADIAN REGULATIONS

DSL LIST: The components of this product are on the DSL or are exempt from reporting under the New Substances Notification Regulations.
IDL: Copper
WHMIS: This product is not subject to WHMIS. It is regulated as a Class 6 Explosive in Canada.

16. OTHER INFORMATION

REVISIONS: New International format, toxicology review – 1/1/03; 7/1/09-changed emergency contact number and mailing address, changed section 8 exposure control personal protection; 1/1/11-review; 5/26/2011-ingredient change; 1/1/12 review; 3/20/12 – Updated Emergency Contact Information; 7/26/12 Update to Transportation Information.; 1/1/13 - review

PREPARED BY: Olin Corporation

OTHER: Additional information available from: www.winchester.com

NOTICE: THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. OLIN BELIEVES THIS INFORMATION TO BE RELIABLE AND CURRENT AS OF THE DATE OF PUBLICATION, BUT MAKES NO WARRANTY THAT IT IS.

Material Safety Data Sheet

24 Hour Assistance:
1-847-367-7700
Rust-Oleum Corp.
www.rustoleum.com

1. Identification

Product Name: STRUST SSPR GLOSS CARNIVAL RED Revision Date: 3/27/2012

Identification Number: 7763830

Product Use/Class: Topcoat/Aerosol

Supplier: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer: Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Preparer: Regulatory Department

2. Hazard Identification

EMERGENCY OVERVIEW: Harmful if swallowed. Extremely flammable liquid and vapor. Vapors may cause flash fire or explosion. Harmful if inhaled. May affect the brain or nervous system causing dizziness, headache or nausea. Contents Under Pressure.

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Causes eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May be absorbed through the skin in harmful amounts. Substance may cause slight skin irritation. Prolonged or repeated contact may cause skin irritation.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing vapors or mists. High vapor concentrations are irritating to the eyes, nose, throat and lungs.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed. Aspiration hazard if swallowed; can enter lungs and cause damage.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Overexposure to xylene in laboratory animals has been associated with liver abnormalities, kidney, lung, spleen, eye and blood damage as well as reproductive disorders. Effects in humans, due to chronic overexposure, have included liver, cardiac abnormalities and nervous system damage. IARC lists Ethylbenzene as a possible human carcinogen (group 2B). Contains Titanium Dioxide. Titanium Dioxide is listed as a Group 2B-"Possibly carcinogenic to humans" by IARC. Significant exposure is not anticipated during brush application or drying. Risk of overexposure depends on duration and level of exposure to dust from repeated sanding of surfaces or spray mist and the actual concentration of Titanium Dioxide in the formula. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

3. Composition/Information On Ingredients

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Liquefied Petroleum Gas	68476-86-8	30.0	N.E.	N.E.	N.E.	N.E.
Toluene	108-88-3	25.0	20 ppm	N.E.	200 ppm	300 ppm
Acetone	67-64-1	20.0	500 ppm	750 ppm	1000 ppm	N.E.
Xylene	1330-20-7	10.0	100 ppm	150 ppm	100 ppm	N.E.
Ethylbenzene	100-41-4	5.0	100 ppm	125 ppm	100 ppm	N.E.
Titanium Dioxide	13463-67-7	5.0	10 mg/m3	N.E.	15 mg/m3 (Total Dust)	N.E.

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: Aspiration hazard: Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. Get immediate medical attention.

5. Fire-fighting Measures

Flash Point, °F -156 (Setaflash)

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: FLASH POINT IS LESS THAN 20 °. F. - EXTREMELY FLAMMABLE LIQUID AND VAPOR! Water spray may be ineffective. Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Perforation of the pressurized container may cause bursting of the can.

SPECIAL FIREFIGHTING PROCEDURES: Evacuate area and fight fire from a safe distance.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Remove all sources of ignition, ventilate area and remove with inert absorbent and non-sparking tools. Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Use only in a well-ventilated area. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing vapor or mist.

STORAGE: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Do not store above 120 ° F. Store large quantities in buildings designed and protected for storage of NFPA Class I flammable liquids. Contents under pressure. Do not expose to heat or store above 120 ° F.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or in any other circumstances where air purifying respirators may not provide adequate protection.

SKIN PROTECTION: Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further information regarding personal protective equipment and its application.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking.

9. Physical and Chemical Properties

Vapor Density	HEAVIER THAN AIR	Odor:	Solvent Like
Appearance:	Aerosolized Mist	Evaporation Rate:	Faster than ether
Solubility in Water:	Slight	Freeze Point:	ND
Specific Gravity:	0.766	pH:	NE
Physical State:	Liquid		

(See section 16 for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid temperatures above 120 ° F. Avoid all possible sources of ignition.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: By open flame, carbon monoxide and carbon dioxide. When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological Information

<u>Chemical Name</u>	<u>LD50</u>	<u>LC50</u>
Liquefied Petroleum Gas	N.E.	N.E.
Toluene	636 mg/kg (Rat, Oral)	>26700 ppm (Rat, Inhalation, 1Hr)
Acetone	5800 mg/kg (Rat)	50100 mg/m3 (Rat, 8Hr)
Xylene	4300 mg/kg (Rat, Oral)	5000 ppm (Rat, Inhalation, 4Hr)
Ethylbenzene	3500 mg/kg (Rat, Oral)	N.E.
Titanium Dioxide	>7500 mg/kg (Rat, Oral)	N.E.

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state and federal regulations and ordinances. Do not allow to enter storm drains or sewer systems.

14. Transport Information

	Domestic (USDOT)	International (IMDG)	Air (IATA)
Proper Shipping Name:	Consumer Commodity	Aerosols	Aerosols
Hazard Class:	ORM-D	2.1	2.1
UN Number:	N.A.	UN1950	UN1950
Packing Group:	N.A.	N.A.	N.A.
Limited Quantity:	No	Yes	Yes

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Pressure Hazard, Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

International Regulations:

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: AB5 D2A

16. Other Information

HMIS Ratings:

Health: 2* Flammability: 4 Physical Hazard: 0 Personal Protection: X

NFPA Ratings:

Health: 2 Flammability: 4 Instability: 0

VOLATILE ORGANIC COMPOUNDS, g/L: 571

REASON FOR REVISION: Regulatory Update

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

Rust-Oleum Corporation believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this material safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. Rust-Oleum Corporation makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.



MATERIAL SAFETY DATA SHEET

Page 1 of 7

HE208 - WET PATCH ROOF LEAK REPAIR

1. Product And Company Identification			
Supplier HENRY COMPANY 999 N. Sepulveda Blvd., Suite 800 El Segundo, CA 90245-2716 Company Contact: Technical Services Telephone Number: (800) 486-1278 Web Site: www.henry.com www.bakor.com		Manufacturer HENRY COMPANY 999 N. Sepulveda Blvd., Suite 800 El Segundo, CA 90245-2716 Company Contact: Technical Services Telephone Number: (800) 486-1278 Web Site: www.henry.com www.bakor.com	
Supplier Emergency Contacts & Phone Number CHEMTREC: (800) 424-9300 CHEMTREC: (703) 527-3887 CANUTEC: (613) 996-6666		Manufacturer Emergency Contacts & Phone Number CHEMTREC: (800) 424-9300 CHEMTREC: (703) 527-3887 CANUTEC: (613) 996-6666	
Issue Date: 05/20/2011 Product Name: HE208 - WET PATCH ROOF LEAK REPAIR Product Code: HE208			
2. Composition/Information On Ingredients			
Ingredient Name		CAS Number	Percent Of Total Weight
1,2,4-trimethylbenzene		95-63-6	1 - 5
aromatic petroleum distillates		64742-95-6	1 - 5
petroleum asphalt		8052-42-4	30 - 60
attapulgite		12174-11-7	5 - 15
calcium carbonate		1317-65-3	15 - 35
cellulose fiber		9004-34-6	5 - 15
silica, quartz		14808-60-7	0.1 - 1
stoddard solvent		8052-41-3	10 - 30
Substances in this product have been pre-registered in accordance with the REACH Regulation - (EC) No. 1907/2006. See Section 15 for additional information.			
EMERGENCY OVERVIEW			
CAUTION! Combustible Liquid. Central nervous system depressant. Vapor may cause light-headedness, headache, nausea, loss of coordination and respiratory tract irritation. Causes skin irritation.			
Appearance/Odor: Black paste, strong petroleum solvent odor			
3. Hazards Identification			
Primary Routes(s) Of Entry Inhalation			
Eye Hazards May cause eye irritation (burning, tearing, redness or swelling).			



HE208 - WET PATCH ROOF LEAK REPAIR

3. Hazards Identification - Continued

Skin Hazards

May cause skin irritation and contact dermatitis upon prolonged contact. Dermal sensitization may occur from repeated and prolonged exposures.

Ingestion Hazards

May be harmful if swallowed. May cause gastric distress, vomiting and diarrhea.

Inhalation Hazards

Exposure to vapors may cause respiratory tract irritation. Inhalation of vapors or mists may cause central nervous system depression, light-headedness, headache, nausea and loss of coordination.

Chronic/Carcinogenicity Effects

This product or one of its ingredients present at 0.1% or more is listed as a carcinogen by NTP, IARC or OSHA. See Section 11 (Toxicological Information) for more details.

4. First Aid Measures

Eye

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

Skin

Remove contaminated clothing and shoes. Wash affected areas with soap and water.

Ingestion

Get medical attention immediately. DO NOT INDUCE VOMITING. Never give anything by mouth to an unconscious victim. Call a physician or poison control center immediately.

Inhalation

Remove the person from the contaminated area to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately.

5. Fire Fighting Measures

Flash Point: >105 °F >40.5 °C

Flash Point Method: Setaflash

Lower Explosive Limit: 0.9

Upper Explosive Limit: 6.0

Fire And Explosion Hazards

Combustible Liquid. Vapors are heavier than air and may spread long distances and ignite. Thermal decomposition (burning) may release irritating, corrosive and/or toxic gases, vapors and fumes.

Extinguishing Media

Chemical foam, carbon dioxide (CO2), or dry chemical. Do not use direct stream of water.

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective gear.

6. Accidental Release Measures

Collect and dispose in accordance with applicable regulations.

7. Handling And Storage

Handling And Storage Precautions

Keep away from ignition sources. Keep containers tightly closed. Store in a cool, dry, well-ventilated area. Do not handle or store near heat, sparks, flame, strong oxidants or strong acids. Use only with adequate ventilation. Ground all



HE208 - WET PATCH ROOF LEAK REPAIR

7. Handling And Storage - Continued

Handling And Storage Precautions - Continued

containers.

8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate general and local exhaust ventilation. When used outdoors, stay well away from building air intakes or close and seal the intakes to prevent product from entering building.

Eye/Face Protection

Safety glasses with side shields or goggles recommended.

Skin Protection

Use with chemical-protective gloves to prevent skin contact.

Respiratory Protection

The level of respiratory protection needed should be based on the evaluation of chemical exposures by a health or safety professional. If required, use a NIOSH-approved air purifying respirator with organic vapor cartridge and particulate filter or supplied air respirator.

Occupational Exposure Limits for individual ingredients (if available) are listed below.

Ingredient(s) - Exposure Limits

1,2,4-trimethylbenzene

ACGIH TLV-TWA 25 ppm

aromatic petroleum distillates

OSHA PEL-TWA 500 ppm

petroleum asphalt

ACGIH TLV-TWA 0.5 mg/m3 (inhalable fraction, as benzene-soluble aerosol)

calcium carbonate

OSHA PEL-TWA 15 mg/m3 (total dust)

OSHA PEL-TWA 5 mg/m3 (respirable dust)

cellulose fiber

ACGIH TLV-TWA 10 mg/m3

silica, quartz

ACGIH TLV-TWA 0.025 mg/m3

OSHA PEL-TWA 30mg/m3 / (%SiO2+2) (total dust)

OSHA PEL-TWA 10 mg/m3/ (%SiO2+2) (respirable dust)

stoddard solvent

ACGIH TLV-TWA 100 ppm

OSHA PEL-TWA 500 ppm

9. Physical And Chemical Properties

Appearance

Black Paste

Odor

Strong Petroleum Solvent Odor

Chemical Type: Mixture

Physical State: Solid

Boiling Point: 310-400 °F

Specific Gravity: 1.14

Percent Volatiles: 22



HE208 - WET PATCH ROOF LEAK REPAIR

9. Physical And Chemical Properties - Continued

Odor - Continued

Vapor Pressure: 2@68°F

Vapor Density: >1

pH Factor: not applicable

Solubility: insoluble in water

Evaporation Rate: <1

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatible Materials

Avoid contact with strong oxidizing agents and acids.

Hazardous Decomposition Products

Toxic and irritating gases, vapors or fumes, carbon monoxide (CO), carbon dioxide (CO₂).

11. Toxicological Information

Chronic/Carcinogenicity

IARC has concluded that the following chemicals in this product are carcinogenic to humans (Group 1): silica, quartz
ACGIH has designated the following chemicals in this product as suspected human carcinogens (A2): silica, quartz
NTP has listed the following chemicals in this product as known human carcinogens: silica, quartz

Risk of cancer depends on duration and level of exposure to this product as a dust.

Miscellaneous Toxicological Information

Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.

Ingredient(s) - Toxicological Data

1,2,4-trimethylbenzene

LD50 (oral, rat): 5000 mg/kg

LC50 (rat): 18 g/m³ (4-hour exposure)

aromatic petroleum distillates

LD50 (oral, rat): 2900 mg/kg

calcium carbonate

oral-rat LD50: 6450 mg/kg

cellulose fiber

LD50 (oral, rat): >2000 mg/kg

LC50 (rat): >5800 mg/m³ (4-hour exposure)

silica, quartz

iv-rat LD50: 500 mg/kg bw/Quartz (10-200 um)

stoddard solvent

oral-rat LD50: >5000 mg/kg

dermal-rabbit LD50: >3000 mg/kg


inhal-rat LC50: >5500 mg/m³ (880 ppm)

inhal-rat LC50: >1300 ppm

12. Ecological Information

No specific information available.

HE208 - WET PATCH ROOF LEAK REPAIR

<p>13. Disposal Considerations</p> <p>Dispose in accordance with applicable federal, state and local government regulations.</p>
<p>14. Transport Information</p> <p>Ground or Water Domestic Voyage</p> <p>Not restricted if shipped in containers <450L (119 gallons) Restricted if shipped in containers >450L (119 gallons)</p> <p>US NA1993, Combustible liquid, n.o.s., (Petroleum Distillates mixture), Combustible liquid, III</p> <p>Canada UN1999, Tars liquid, 3, III</p> <p>Unless departs > flash point:</p> <p>Both UN3256, Elevated Temperature liquid, flammable, n.o.s., (Petroleum Distillates mixture), 3, III</p> <p>IMDG IMDG Code 2.3.2.5 - exempted from marking, labeling & testing of packages</p> <p>IATA UN1999, Tars liquid, 3, III</p> <p><u>DOT (Pictograms)</u></p> 
<p>15. Regulatory Information</p> <p><u>U.S. Regulatory Information</u></p> <p>Asphalt may contain detectable amounts of chemicals known to the State of California to cause cancer or reproductive harm.</p> <p><u>Ingredient(s) - U.S. Regulatory Information</u></p> <p>1,2,4-trimethylbenzene SARA Title III - Section 313 Form "R"/TRI Reportable Chemical</p> <p><u>Ingredient(s) - State Regulations</u></p> <p>1,2,4-trimethylbenzene New Jersey - Workplace Hazard New Jersey - Environmental Hazard Massachusetts - Hazardous Substance New York City - Hazardous Substance</p> <p>aromatic petroleum distillates New Jersey - Workplace Hazard Pennsylvania - Workplace Hazard</p> <p>petroleum asphalt New Jersey - Workplace Hazard Pennsylvania - Workplace Hazard Massachusetts - Hazardous Substance New York City - Hazardous Substance</p> <p>attapulgit California - Proposition 65</p>

HE208 - WET PATCH ROOF LEAK REPAIR

15. Regulatory Information - Continued

Ingredient(s) - State Regulations - Continued

calcium carbonate
 Pennsylvania - Workplace Hazard
 cellulose fiber
 Pennsylvania - Workplace Hazard
 silica, quartz
 New Jersey - Workplace Hazard
 Pennsylvania - Workplace Hazard
 California - Proposition 65
 Massachusetts - Hazardous Substance
 stoddard solvent
 New Jersey - Workplace Hazard
 Pennsylvania - Workplace Hazard
 Massachusetts - Hazardous Substance
 New York City - Hazardous Substance

Canadian Regulatory Information

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. WHMIS Classification: B3 - Combustible Liquid, D2A - Very Toxic

Ingredient(s) - Canadian Regulatory Information

1,2,4-trimethylbenzene
 WHMIS - Ingredient Disclosure List
 silica, quartz
 WHMIS - Ingredient Disclosure List
 stoddard solvent
 WHMIS - Ingredient Disclosure List

European Union (EU) Regulatory Information


REACH Pre-registration Information:

Substance (CAS#)	Reference Number
Asphalt (8052-42-4)	05-2114366982-36-0000
Stoddard Solvent (8052-41-3)	05-2114367025-53-0000
Calcium Carbonate (1317-65-3)	05-2114501824-55-0000
Cellulose (9004-34-6)	05-2114366989-22-0000
1,2,4-Trimethylbenzene (95-63-6)	05-2114501851-58-0000
1,3,5-Trimethylbenzene (108-67-8)	05-2114501879-40-0000
Xylene (1330-20-7)	05-2114367081-55-0000
Attapulgite (12174-11-7)	NA-Naturally Occurring Substanc

WHMIS - Canada (Pictograms)



HE208 - WET PATCH ROOF LEAK REPAIR

NFPA	HMIS								
	<table border="1"><tr><td>HEALTH</td><td style="text-align: center;">2</td></tr><tr><td>FLAMMABILITY</td><td style="text-align: center;">2</td></tr><tr><td>REACTIVITY</td><td style="text-align: center;">0</td></tr><tr><td>PERSONAL PROTECTION</td><td></td></tr></table>	HEALTH	2	FLAMMABILITY	2	REACTIVITY	0	PERSONAL PROTECTION	
HEALTH	2								
FLAMMABILITY	2								
REACTIVITY	0								
PERSONAL PROTECTION									

16. Other Information

Revision/Preparer Information

This MSDS Supersedes A Previous MSDS Dated: 06/10/2010

Disclaimer

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purposes(s).



Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: SCOTCHKOTE BRAND ELECTRICAL COATING

MANUFACTURER: 3M

DIVISION: Electrical Markets Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 07/21/11

Supersedes Date: 05/06/11

Document Group: 10-2644-2

Product Use:

Intended Use: MOISTURE PROOFING FOR WIRE CONNECTIONS

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
ACETONE	67-64-1	40 - 45
ACRYLONITRILE-BUTADIENE POLYMER	9003-18-3	10 - 15
TOLUENE	108-88-3	10 - 15
METHYL ETHYL KETONE	78-93-3	10 - 15
PHENOL-FORMALDEHYDE RESIN	25085-50-1	5 - 10
GLYCEROL ESTERS OF ROSIN ACIDS	8050-31-5	5 - 10
SALICYLIC ACID	69-72-7	1 - 2
ZINC OXIDE	1314-13-2	1 - 2
ANTIOXIDANT	68411-46-1	0.1 - 1

Minute quantities of the substances listed below may be emitted during Normal Use:

Substance
Hydrocarbons

Condition
Normal Use

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Brown, solvent odor

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. May cause target organ effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

May be absorbed through skin and cause target organ effects.

Inhalation:

May be harmful if inhaled.

Upper Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May be absorbed following inhalation and cause target organ effects.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, nausea, diarrhea and vomiting.

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Prolonged or repeated exposure may cause:

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Central Neuropathy: Signs/symptoms may include irritability, memory impairment, personality changes, sleep disorders, and decreased ability to concentrate.

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness and tremors.

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	<i>No Data Available</i>
Flash Point	0.0 °F [<i>Test Method:</i> Closed Cup]
Flammable Limits(LEL)	2.15 %
Flammable Limits(UEL)	13.0 %
OSHA Flammability Classification:	Class IB Flammable Liquid

5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

Unusual Fire and Explosion Hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

6.2. Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

Clean-up methods

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Cover spill area with a fire-extinguishing foam. An aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible using non-sparking tools. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS. Seal the container.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Contents may be under pressure, open carefully. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. Do not pierce or burn container, even after use. No smoking while handling this material. Do not spray near flames or sources of ignition. Avoid breathing of vapors, mists or spray. Avoid prolonged or repeated skin contact. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Be sure that any people in the area follow the precautions. Attach a copy of the precautions to any other container to which this product may be transferred. Avoid prolonged breathing of vapors. Avoid eye and skin contact. Keep container closed when not in use. If work area conditions prevent compliance with any of the above precautions, do not use the product. Keep out of the reach of children. Avoid contact with oxidizing agents.

7.2 STORAGE

Store in a cool place. Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Provide local exhaust ventilation at transfer points. Provide appropriate local exhaust ventilation on open containers. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.
The following eye protection(s) are recommended: Indirect Vented Goggles

8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Fluoroelastomer

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and P95 particulate prefilters . Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with your respirator manufacturer for selection of appropriate types of respirators.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
ACETONE	ACGIH	TWA	500 ppm	
ACETONE	ACGIH	STEL	750 ppm	
ACETONE	OSHA	TWA	2400 mg/m3	
METHYL ETHYL KETONE	ACGIH	TWA	200 ppm	
METHYL ETHYL KETONE	ACGIH	STEL	300 ppm	
METHYL ETHYL KETONE	OSHA	TWA	590 mg/m3	
TOLUENE	ACGIH	TWA	20 ppm	
TOLUENE	CMRG	STEL	75 ppm	Skin Notation*
TOLUENE	OSHA	TWA	200 ppm	
TOLUENE	OSHA	CEIL	300 ppm	
ZINC OXIDE	ACGIH	TWA, respirable fraction	2 mg/m3	
ZINC OXIDE	ACGIH	STEL, respirable fraction	10 mg/m3	
ZINC OXIDE	OSHA	TWA, as fume	5 mg/m3	
ZINC OXIDE	OSHA	TWA, respirable fraction	5 mg/m3	
ZINC OXIDE	OSHA	TWA, as total dust	15 mg/m3	

* Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- CMRG: Chemical Manufacturer Recommended Guideline
- OSHA: Occupational Safety and Health Administration
- AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color, Grade:	Brown, solvent odor
General Physical Form:	Liquid
Autoignition temperature	<i>No Data Available</i>
Flash Point	0.0 °F [<i>Test Method:</i> Closed Cup]
Flammable Limits(LEL)	2.15 %
Flammable Limits(UEL)	13.0 %
Boiling Point	>=134 °F

Vapor Pressure <=27 psia [@ 131.000000000 °F] [*Details:* MITS data]

Specific Gravity 0.88 [*Details:* MITS data]

pH
Melting point

Not Applicable
No Data Available

Evaporation rate
Volatile Organic Compounds

No Data Available
Approximately 28 % [*Details: SPECIFIC METHOD: calcd. per 3M*]

Kow - Oct/Water partition coef
VOC Less H2O & Exempt Solvents

No Data Available
Approximately 505 g/l [*Details: SPECIFIC METHOD: Calcd. per 3M*]

Viscosity

325 centipoise [*@ 73.400000000 °F*] [*Details: MITS data*]

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

None known

10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance

Amine Compounds
Carbon monoxide
Carbon dioxide
Oxides of Nitrogen

Condition

Not Specified
During Combustion
During Combustion
During Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D035 (Methyl ethyl ketone)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
ZINC OXIDE (ZINC COMPOUNDS)	1314-13-2	1 - 2
TOLUENE	108-88-3	10 - 15
METHYL ETHYL KETONE	78-93-3	10 - 15

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
TOLUENE	108-88-3	*Developmental Toxin

* WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.

CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS. Contact 3M for more information.

Additional Information: All ingredients on TSCA; EINECS; CDSL

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 2 Flammability: 3 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Reason for Reissue: The MSDS has been revised because 3M has adopted the 16-section ANSI/ISO format. The potential hazards of the product have not changed. We encourage you to reread the MSDS and review the information.

Revision Changes:

Section 9: Property description for optional properties was modified.

Section 2: Ingredient table was modified.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

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3M USA MSDSs are available at www.3M.com



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DAP(R) 100% SILICONE RUBBER SEALANT CLEAR, 8641

1. PRODUCT AND COMPANY IDENTIFICATION

Dow Corning Corporation
South Saginaw Road
Midland, Michigan 48686

24 Hour Emergency Telephone: (989) 496-5900

Customer Service: (989) 496-6000

Product Disposal Information: (989) 496-6315

CHEMTREC: (800) 424-9300

MSDS No.: 04061395

Revision Date: 2005/06/01

Generic Description: Silicone elastomer

Physical Form: Paste

Color: Colorless

Odor: Acetic acid odor

NFPA Profile: Health 2 Flammability 1 Instability/Reactivity 0

Note: NFPA = National Fire Protection Association

2. OSHA HAZARDOUS COMPONENTS

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
17689-77-9	1.0 - 5.0	Ethyltriacetoxysilane
4253-34-3	1.0 - 5.0	Methyltriacetoxysilane

The above components are hazardous as defined in 29 CFR 1910.1200.

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Acute Effects

Eye: Direct contact may cause moderate irritation.

Skin: May cause moderate irritation.

Inhalation: Material is not likely to present an inhalation hazard at ambient conditions. However, if material is heated or high vapor/aerosol concentrations are attained, central nervous system depression may occur, which is characterized by drowsiness, dizziness, confusion or loss of coordination.

Oral: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: No known applicable information.



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Inhalation: No known applicable information.

Oral: No known applicable information.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

4. FIRST AID MEASURES

Eye: Immediately flush with water for 15 minutes. Get medical attention.

Skin: Remove from skin and wash thoroughly with soap and water or waterless cleanser. Get medical attention if irritation or other ill effects develop or persist.

Inhalation: Material is not likely to present an inhalation hazard at ambient conditions. If material is heated or vapor/mist/dust/fumes are generated, care should be taken to prevent inhalation. In case of exposure to vapor/mist/dust/fumes, move to fresh air.

Oral: No first aid should be needed.

Comments: Treat according to person's condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Flash Point: > 212 °F / > 100 °C (Closed Cup)

Autoignition Temperature: Not determined.

Flammability Limits in Air: Not determined.

Extinguishing Media: On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO₂), dry chemical or water spray. Water can be used to cool fire exposed containers.

Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

Unusual Fire Hazards: None.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous



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decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

6. ACCIDENTAL RELEASE MEASURES

Containment/Clean up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

Note: See section 8 for Personal Protective Equipment for Spills. Call (989) 496-5900, if additional information is required.

7. HANDLING AND STORAGE

Use with adequate ventilation. Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc within exposure guidelines or use respiratory protection. Avoid eye contact. Avoid skin contact. Do not take internally. Avoid breathing vapor. Keep container closed.

Use reasonable care and store away from oxidizing materials. Keep container closed and store away from water or moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

<u>CAS Number</u>	<u>Component Name</u>	<u>Exposure Limits</u>
17689-77-9	Ethyltriacetoxysilane	See acetic acid comments.
4253-34-3	Methyltriacetoxysilane	See acetic acid comments.

Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm and ACGIH TLV: TWA 10 ppm, STEL 15 ppm.

Engineering Controls

Local Ventilation: Recommended.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling



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Eyes:	Use proper protection - safety glasses as a minimum.
Skin:	Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.
Suitable Gloves:	Nitrile Rubber. Butyl Rubber.
Inhalation:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.
Suitable Respirator:	Respiratory protection is not needed under ambient conditions. If vapor/mist/dust/fumes are generated when material is heated or handled, the following is advised. General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

Personal Protective Equipment for Spills

Eyes:	Use full face respirator.
Skin:	Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.
Inhalation/Suitable Respirator:	Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MHSA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Precautionary Measures:	Avoid eye contact. Avoid skin contact. Do not take internally. Avoid breathing vapor. Keep container closed. Use reasonable care.
Comments:	Product evolves acetic acid (HOAc) when exposed to water or humid air. Provide ventilation during use to control HOAc within exposure guidelines or use respiratory protection. When heated to temperatures above 150 C (300 F) in the presence of air, product may form formaldehyde vapors. Physical and health hazard information is readily available from Dow Corning Corporation and the Material Safety Data Sheet.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: Paste



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DAP(R) 100% SILICONE RUBBER SEALANT CLEAR, 8641

Color: Colorless
 Odor: Acetic acid odor
 Specific Gravity @ 25°C: 1.007
 Viscosity: Not determined.
 Freezing/Melting Point: Not determined.
 Boiling Point: Not determined.
 Vapor Pressure @ 25°C: Not determined.
 Vapor Density: Not determined.
 Solubility in Water: Not determined.
 pH: Not determined.
 Volatile Content: Not determined.

Note: The above information is not intended for use in preparing product specifications.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Hazardous polymerization will not occur.

Conditions to Avoid: None.

Materials to Avoid: Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8.

11. TOXICOLOGICAL INFORMATION

Special Hazard Information on Components

No known applicable information.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

Ecotoxicity Classification Criteria

	High	Medium	Low
Hazard Parameters (LC50 or EC50)	<=1	>1 and <=100	>100
Acute Aquatic Toxicity (mg/L)	<=100	>100 and <= 2000	>2000
Acute Terrestrial Toxicity			



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This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34, 1993.

This table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? No

State or local laws may impose additional regulatory requirements regarding disposal.

Call (989) 496-6315, if additional information is required.

14. TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Not subject to DOT.

Ocean Shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.

15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances (40 CFR 355):

None.

Section 304 CERCLA Hazardous Substances (40 CFR 302):

None.

Section 311/312 Hazard Class (40 CFR 370):

Acute: Yes
Chronic: No
Fire: No



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Pressure: No

Reactive: No

Section 313 Toxic Chemicals (40 CFR 372):

None present or none present in regulated quantities.

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

Massachusetts

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
7631-86-9	7.0 - 13.0	Silica, amorphous

New Jersey

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
70131-67-8	> 60.0	Dimethyl siloxane, hydroxy-terminated
7631-86-9	7.0 - 13.0	Silica, amorphous
64742-46-7	<=7.0	Hydrotreated middle petroleum distillates
17689-77-9	1.0 - 5.0	Ethyltriacetoxysilane
4253-34-3	1.0 - 5.0	Methyltriacetoxysilane

Pennsylvania

<u>CAS Number</u>	<u>Wt %</u>	<u>Component Name</u>
70131-67-8	> 60.0	Dimethyl siloxane, hydroxy-terminated
7631-86-9	7.0 - 13.0	Silica, amorphous
64742-46-7	<=7.0	Hydrotreated middle petroleum distillates



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16. OTHER INFORMATION

Prepared by: Dow Corning Corporation

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

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<http://www.xiameter.com>



Material Safety Data Sheet

20-JUNE-2012

SpecSeal® SERIES SSS SEALANT

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

PRODUCT NAME.....SpecSeal® SERIES SSS Sealant

CHEMICAL FAMILY.....Mixture

Company Identification

MANUFACTURER/DISTRIBUTOR

Specified Technologies Inc.
210 Evans Way
Somerville, NJ 08876

PHONE NUMBERS

Product Information : 1-908-526-8000
Emergency : 1-800-255-3924

HAZARDS IDENTIFICATION

*****EMERGENCY OVERVIEW*****
* Possible skin and eye irritant. Paste. *

Potential Health Effects:

EYE: Contact may cause irritation.

SKIN: Contact may cause irritation.

INGESTION: Relatively non-toxic.

INHALATION: Irritation of the nose, throat, and lungs may result from over-exposure to vapors or mist.

CHRONIC (CANCER) INFORMATION: Not classified as carcinogenic.

LONG TERM TOXIC EFFECTS: None known.

COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary mixture containing in part:

INGREDIENT NAME
ACRYLIC POLYMER
ALUMINA TRIHYDRATE
GRAPHITE
CALCIUM CARBONATE

CAS NUMBER
52640-81-0
21645-51-2
7782-47-8
1317-65-3

FIRST AID MEASURES

First Aid

INHALATION: Remove to fresh air.

SKIN CONTACT: Wash thoroughly.

EYE CONTACT: Irrigate eyes with running water for at least 15 minutes. Get medical attention if irritation develops.

INGESTION: None applicable.

FIRE FIGHTING MEASURES

Not a fire hazard.

EXTINGUISHING MEDIA.....Dry Chemical; Carbon Dioxide; Foam; Water spray for large fires.

SPECIAL FIRE FIGHTING PROCEDURES:.....As for surrounding fire.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up

HANDLING AND STORAGE

Store under ambient conditions. No special handling required.

EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION REQUIREMENTS:..... Safety glasses/goggles.

SKIN PROTECTION REQUIREMENTS: Gloves.

RESPIRATOR REQUIREMENTS: None.

VENTILATION REQUIREMENTS:.....If needed, use local exhaust ventilation to keep airborne concentrations below the TLV.

Exposure Guidelines

Exposure Limits

PEL(OSHA) : Particulates (Not Otherwise Classified) 15 mg/m³, 8 Hr. TWA, total dust 5 mg/m³, 8 Hr. TWA, respirable dust

TLV(ACGIH): None Established

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM Red paste with minimal odor

SPECIFIC GRAVITY 1.24

PERCENT VOLATILES 20

EVAPORATION RATE..... >1

BOILING POINT 100 deg. C

SOLUBILITY IN WATER..... Infinitely dilutable

CARB VOC (Calculated)..... 0.40 Wt. %

SCAQMD VOC (US EPA Method 24).....29.2 Grams/Liter

STABILITY AND REACTIVITY

STABILITY:..... This is a stable material.

CONDITIONS TO AVOID Storage >55 deg. C

HAZARDOUS POLYMERIZATION:..... Will not occur.

INCOMPATIBILITIES:.....None special.

TOXICOLOGICAL INFORMATION

Mixture not tested but based on components:

May be irritating to skin and eyes and may aggravate existing skin and eye conditions.

None of the components are listed as carcinogens.

ECOLOGICAL INFORMATION

No data.

DISPOSAL CONSIDERATIONS

Waste Disposal:

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

TRANSPORTATION INFORMATION

DOT – not regulated.

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status: Reported/Included.

Section 313 Supplier Notifications.

This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372:

OTHER INFORMATION

NPCA-HMIS Rating

Health : 1
Flammability : 0
Reactivity : 0

Personal Protection rating to be supplied by user depending on use conditions.

STATE RIGHT-TO-KNOW LAWS

No substances on the state hazardous substances list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these products, or the raw materials used in their manufacture, for substances on various state hazardous substances lists, to the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

SUBSTANCES ON THE NEW JERSEY WORKPLACE HAZARDOUS SUBSTANCE LIST PRESENT AT A CONCENTRATION OF 1% OR MORE (0.1% FOR SUBSTANCES IDENTIFIED AS CARCINOGENS, MUTAGENS OR TERATOGENS): NJTSRN-SSS100 Graphite, Alumina

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER:

None known.,

WARNING: SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: None known.

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the data compiled. However, no representation, warranty, or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information.

Responsibility for MSDS :

Specified Technologies Inc.
210 Evans Way
Somerville, NJ 08876

MATERIAL SAFETY DATA SHEET

DATE: 08/16/10

Revision #11 Page 1 of 2

Section 1

PACER TECHNOLOGY
9420 Santa Anita Avenue
Rancho Cucamonga, CA 91730

For Chemical Emergency Only:
In the US & Canada (800) 424-9300
Int'l & Wash DC (COLLECT) (703) 527-3887
Telephone for Information: (909) 987-0550

(HMIS or NFPA) HAZARD RATING

Health = 1

Flammability = 2

Reactivity = 1

PRODUCT IDENTIFICATION: Super Glue

Section 2 - HAZARDOUS INGREDIENTS INFORMATION:

Hazardous Components (Common Names, CAS Number)	OSHA PEL	ACGIH TLV	OTHER LIMITS	% OPTION
Ethyl-2-Cyanoacrylate (7085-85-0)	NE	NE	0.2ppm TWA	60-100
Poly (Methyl Methacrylate) (9011-14-7)	NE	NE		10-30
Hydroquinone* (123-31-9)	2mg/m3	2mg/m3		0-1

*This ingredient is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act of 1986 (SARA) and 40 CFR 372.

Section 3 - PHYSICAL/CHEMICAL CHARACTERISTICS:

Boiling Point: 365 F Specific Gravity (H₂O=1): 1.05
Vapor Density (Air=1): nil-NE Melting Point: NE
Vapor Pressure (mm Hg): 1 @ 20 C Evaporation Rate (Butyl acetate=1): nil-NE
Solubility in Water: Insoluble, material reacts to hardened mass for non-hazardous waste.
VOC: This product is VOC compliant for sale in California.
Appearance & Odor: Transparent water-white to straw colored liquid with stimulative odor.

Section 4 - FIRE AND EXPLOSION HAZARD DATA:

Flash Point (Method Used): 185 F (TCC) Flammable Limits: LEL: NE UEL: NE
Extinguishing Media: Flush with large amounts of water or dry chemical extinguisher.
Special Fire Fighting Procedures: Fumes may be irritating if not burning and require air supply with goggles while applying large amounts of water or dry chemical extinguisher.
Unusual Fire and Explosion Hazards: None. Combustible requiring the above procedures.

Section 5 - REACTIVITY DATA:

Stability: Stable XX Conditions to Avoid: Excessive heat above 176 F, moisture and alkalines. Stable up to 122 F. Store in a cool dry place.
Incompatibility (Materials to Avoid): Polymerized by water, alcohol, amines, alkaline materials and direct UV.
Hazardous Decomposition Products: Combustible by-products of carbon monoxide/dioxide.
Hazardous Polymerization: May Not Occur XX

Section 6 - HEALTH HAZARD DATA:

Route(s) of Entry: Inhalation: Yes Oral LD50 = > 5000 mg/kg (estimated)
Dermal LD50 = > 2000 mg/kg (estimated)
Health Hazards (Acute and Chronic):
Acute - Irritates eyes, mucous membranes.
Chronic - No residual effects of acute properties.
Carcinogenicity: NTP: No IARC Monographs: No OSHA Regulated: No

First Aid Procedures:

Eye contact - Tearing from eye irritation. Remove to fresh air. Flush areas of contact with water. Adhesive will disassociate from eye/eyelids over time, usually within several hours. Temporary weeping of eyes/double vision may be experienced until clearance is achieved.

Skin contact - Immerse bonded areas in warm, soapy water. Peel or roll skin apart. Remove cured adhesive with several applications of warm, soapy water. Prolonged or repeated contact at elevated levels may cause dermatitis in sensitive individuals.

Inhalation - Irritation of mucous membranes/coughing. Remove to fresh air. Prolonged or repeated exposure at elevated levels may produce allergic reactions with asthma-like symptoms in sensitive individuals.

Ingestion - Lips may become stuck together: apply copious amounts of warm water & encourage wetting/pressure from saliva inside mouth. Peel or roll (do not pull) lips apart. It is almost impossible to swallow cyanoacrylate as adhesive solidifies upon contact with saliva & may adhere to inside of mouth. Saliva will lift adhesive in 1-2 days, avoid swallowing adhesive after detachment.

Medical Conditions Generally Aggravated by Exposure: Pre-existing skin, eye and respiratory disorders may be aggravated by exposure.

Section 7 - PRECAUTIONS FOR SAFE HANDLING AND USE:

Steps to Be Taken in Case Material is Released or Spilled: Polymerize with water. Solid material may be scraped from surface.

Waste Disposal Method: Incinerate solid combustible waste or dump as chemical waste according to local, state and federal regulations.

Precautions to Be Taken in Handling and Storing: Avoid contact with clothing as contact can cause burn. Avoid moisture, direct UV-sunlight and do not store above 25 C. Keep containers closed tightly when not in use. Ideal storage: 5-10 C.

Other Precautions: Avoid breathing vapor, contact with eyes/skin. Allow product to reach room temperature before use.

Section 8 - CONTROL MEASURES:

Respiratory Protection (Specify Type): A NIOSH-approved organic vapor canister may be used to maintain vapor concentration below TLV.

Ventilation: Local Exhaust: To maintain vapor concentration below TLV.

Mechanical (General): Large amounts used to 0.2ppm.

Protective Clothing or Equipment: Safety glasses with side shield, Vinyl (polyethylene) non-sticking gloves, rubber apron to protect clothing.

Work/Hygienic Practices: Soap and water helps remove adhesive from skin.

Section 9 - OTHER: Super Glue - Not regulated for transportation.

NE = Not established

The data contained herein is based upon information that Pacer Technology believes to be reliable. Users of this product have the responsibility to determine the suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. All statements or suggestions are made without warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

MATERIAL SAFETY DATA SHEET

1. **GB ELECTRICAL INC.**
6101 N. BAKER ROAD
P.O. Box 53
MILWAUKEE, WI 53209 USA

**Product Name: SUPER SLICK™
Cable Pulling Lubricant**

Date Reviewed: January 19, 2009

Emergency Number: 800-624-4320

2. HAZARDOUS INGREDIENTS

This product contains no reportable hazardous components under 29 CFR 1910.1200. There are no OSHA or ACGIH threshold limit values for the product or any of its ingredients.

All components are listed on the TSCA inventory.

3. HAZARDS IDENTIFICATION

Emergency Overview

Low solids, water-based lubricant containing polysiloxane. Slightly gelled, cream-colored, pourable liquid, with small roller balls.

Lubricant is electrically conductive when applied. Dry from conductor before energizing circuit. In case of eye contact, flush eyes with water. Industrial use only. Very slippery if spilled.

Eye Contact: Direct eye contact may cause eye irritation. This irritation is minimal and expected to be transient.

Skin Contact: This product has low skin irritation potential. There is no dermal toxicity hazard.

Inhalation (Breathing): No inhalation hazard expected with water vapor.

Ingestion (Swallowing): This product has low ingestion hazard.

Carcinogenic Status: This substance has not been identified as a carcinogen or probable carcinogen by NTP, IARC or OSHA, nor have any of its components.

4. FIRST AID

Eye Contact: Flush eyes with a large quantity of water for 15 minutes. If irritation continues, seek medical attention.

Skin Contact: If skin becomes irritated, wash area thoroughly with soap and water. If irritation continues, seek medical attention.

Inhalation (Breathing): No first aid expected to be required. Not an inhalation hazard.

Ingestion (Swallowing): No first aid expected to be required. If difficulties arise, contact a physician.

5. FIRE AND EXPLOSION HAZARD

Flash Point: No flash via TCC.

Flammable Limits: Product is not flammable.

Extinguishing Media: Does not apply.

Special Procedures: Does not apply.

Unusual Hazards: Sealed container can build up pressure when exposed to high heat. Cool containers with water.

Hazardous Decomposition Products: High temperature steam, potentially carbon monoxide and carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Super Slick™ Cable Pulling Lubricant is extremely slippery. They should be washed, swept, or squeegeed from floor using wet mops. Oxidizing agents, such as household bleach, can be used to eliminate the slippery character. Outside, spills should be covered with sand, dirt, gravel or calcium chloride.

7. HANDLING AND STORAGE

Keep product containers closed when not in use. Avoid spills and clean them up immediately when they occur. Product is very slippery.

8. CONTROL MEASURES

Respiratory Protection: Normal ventilation adequate.

Protective Gloves: For repeated or prolonged skin contact, the use of impermeable gloves is recommended to prevent drying and possible irritation.

Eye Protection: Safety glasses recommended.

9. PHYSICAL DATA

Appearance: Opaque, cream-colored liquid suspended with small plastic rollers

Vapor Pressure: 18 mm @ 72°F

Specific Gravity (H₂O = 1): 1.01

Percent Volatiles (Weight): >90%

Viscosity: 13,000-20,000 cps. @ 10 rpm.

Boiling Point: ~ 212°F (100°C)

Ignition Temperature: None - below boiling

Vapor Density (Air = 1): .9 to 1.1

Solubility in Water: Infinite

pH: 7.5 to 9.0

VOC Content: 10 gms/L

10. REACTIVITY DATA

Stability: Stable

Incompatibility: Avoid materials which react with water.

Hazardous Polymerization: Will not occur.

11. HEALTH HAZARD/TOXICOLOGICAL INFORMATION

Refer to Section 3 for available information on potential health effects.

Based on ingredients, LD₅₀ (rat) is estimated to be well over 50 g/kg.

12. DISPOSAL CONSIDERATIONS

Dispose of product in accordance with local, county, state, and federal regulations. Super Slick™ Cable Pulling Lubricant are not considered hazardous waste under RCRA.

13. TRANSPORTATION

DOT Hazard Class: Not Applicable

DOT Shipping Name: Not Applicable

For domestic purposes, this product is not defined or designated as a hazardous material by the U.S. Department of Transportation.

14. REGULATORY STATUS

Canada WHMIS Class: NC

Hazard Categories for SARA Section 311/312 Reporting	Acute	Chronic	Fire	Pressure	Reactive
	No	No	No	No	No

<u>Components</u>	<u>CERCLA/SARA Sec. 302 Hazardous Substance RQ</u>	<u>EHS TPQ</u>	<u>SARA Sec. 313 Toxic Release</u>

The components of Super Slick™ Cable Pulling Lubricant are not affected by these Superfund regulations.

COTTO-WAXO CO -- COTTO-WAXO SANDED OIL BASE RED -- 6850-00F028418

===== Product Identification =====

Product ID:COTTO-WAXO SANDED OIL BASE RED

MSDS Date:08/17/1990

FSC:6850

NIIN:00F028418

MSDS Number: BRBZF

=== Responsible Party ===

Company Name:COTTO-WAXO CO

Address:3330 N BROADWAY

City:ST LOUIS

State:MO

ZIP:63147

Country:US

Info Phone Num:314-436-0300

Emergency Phone Num:314-436-0300

CAGE:COTTO

=== Contractor Identification ===

Company Name:COTTO-WAXO CO

Address:3330 N BROADWAY

City:ST LOUIS

State:MO

ZIP:63147

Country:US

Phone:314-436-0300

CAGE:COTTO

===== Composition/Information on Ingredients =====

Ingred Name:SAWDUST

Ingred Name:SILICA DIOXIDE, CRYSTALLINE QUARTZ, SAND (SUSPECTED HUMAN
CARCINOGEN BY IARC & ACGIH)

CAS:14808-60-7

RTECS #:VV7330000

Other REC Limits:0.05 MG/CUM NIOSH

OSHA PEL:SEE TABLE Z3

ACGIH TLV:0.1 MG/M3 RDUST;9293

Ingred Name:HYDROTREATED MIDDLE PETROLEUM DISTILLATE, PETROLEUM SOLVENT

CAS:64742-46-7

RTECS #:JN9379645

Ingred Name:LIGHT NAPHTHALIC DISTILLATE, HYDROTREATED LIGHT NAPHTHENIC
DISTILLATE

CAS:64742-53-6

RTECS #:PY8036000

Ingred Name:C I PIGMENT RED 57 CALCIUM SALT *93/1*

CAS:5281-04-9

===== Hazards Identification =====

Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO

Explanation of Carcinogenicity:SEE INGREDIENTS.

=====
First Aid Measures
=====

First Aid:SKIN: WIPE EXCESS. WASH W/SOAP & WATER. OBTAIN MEDICAL ATTENTION IN ALL CASES.

=====
Fire Fighting Measures
=====

Flash Point Method:PMCC
Flash Point:>200F
Extinguishing Media:WATER, WATER SPRAY, FOAM, CO2, OR DRY CHEMICALS

=====
Accidental Release Measures
=====

Spill Release Procedures:RECOVER FREE MATERIAL. NO SPECIAL METHOD.

=====
Exposure Controls/Personal Protection
=====

Protective Gloves:SAFETY GLASSES
Work Hygienic Practices:WASH HANDS W/SOAP & WATER AFTER USE.
Supplemental Safety and Health

=====
Physical/Chemical Properties
=====

Appearance and Odor:HOMOGENEOUS MIXTURE , RED COLOR W/LUBE OIL SMELL

=====
Stability and Reactivity Data
=====

Stability Indicator/Materials to Avoid:YES

=====
Disposal Considerations
=====

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE W/LOCAL, STATE, & FEDERAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):
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MATERIAL SAFETY DATA SHEET

U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200

The Steco Corporation
2330 Cantrell Road
P.O. Box 2238
Little Rock, AR 72203

Emergency Response: (800) 255-3924
Information: (800) 643-8026
Fax #: (501) 374-4278
Date Reviewed: **August 15, 2011**

TRADE NAME: **TAP MAGIC ORIGINAL Cutting Fluid**
CHEMICAL NAME & SYNONYMS: Hydrocarbon Mixture
DOT SHIPPING NAME: 1,1,1-Trichloroethane Class 6.1 UN 2831, III
HMIS/NFPA CODE: Health 2; Fire 0; Reactivity 1; Specific - solvent
MANUFACTURING CODE NO.: 8358
COMMODITY CODE NO.: 332-9150

I. HAZARDOUS INGREDIENTS

Component	CAS #	OSHA PEL ppm	ACGIH TLV ppm	Other Limits Recommended	Max.%
1,1,1 Trichloroethane	71-55-6	350	350	STEL-450	90
tert-butyl alcohol	75-65-0	100	100	STEL-150	3
1,2-Butylene Oxide	106-88-7	Not Listed	Not Listed	est. STEL-100	3
Dimethoxymethane	109-87-5	1000	1000	STEL-1250	3
Petroleum Oil, aliphatic	68815-10-1	Not Listed	Not Listed	Not Listed	3
Vegetable Oil, essential	8007-80-5	Not Listed	Not Listed	None	3

II. PHYSICAL DATA

BOILING RANGE, (760 mm, Mercury) : 158-190 degrees F (70-80 C)
SPECIFIC GRAVITY (Water =1), lbs/gal. : (1.35), 11.3 lbs/gal.
VAPOR PRESSURE (mm of Mercury) @ 68 degrees F : 100
VAPOR DENSITY (Air = 1) : 4.55
SOLUBILITY IN WATER, % by weight : 0.07
EVAPORATION RATE (Butyl Acetate = 1) : 0.6 gal./sq.ft./day @ 76.6 F (24.4 C)
% VOLATILE BY VOLUME : Greater than 90%
APPEARANCE : Amber liquid, non-aqueous
ODOR : Aromatic

III. FIRE & EXPLOSION DATA

FLASH POINT, TOC, TCC, PMCC: None
AUTOIGNITION TEMPERATURE: None
EXTINGUISHING MEDIA: Water Fog
SPECIAL FIRE FIGHTING PROCEDURES: Positive pressure, self-contained respiratory equipment
UNUSUAL FIRE AND EXPLOSION HAZARD: Product does not present any fire hazard, however, when concentrated vapors are exposed to open flames or high energy electrical arcs, irritating and toxic gasses (HCL) may be formed. Flammability limits have been established utilizing high energy electrical arcs: LFL 6%; UFL 16.7%.

IV. HEALTH HAZARD INFORMATION

ROUTES OF ENTRY : Exposure may occur via inhalation, skin contact or ingestion.

EFFECTS OF ACUTE OVEREXPOSURE
INHALATION: Minimal anesthetic or narcotic effects may be seen in the range of 500-1000 ppm. Progressively higher levels over 1000 ppm may cause dizziness, drunkenness; concentrations as low as 10,000 ppm can cause unconsciousness and death. In confined or poorly ventilated areas, vapors which readily accumulate can cause unconsciousness and death. These high levels may also cause cardiac arrhythmias (irregular heart beats).
SKIN CONTACT: A single prolonged skin exposure is not likely to result in absorption of harmful amounts. The LD50 for rabbits is about 15,000 mg/kg.
INGESTION: Single dose oral toxicity is low. The LD50 for rats is greater than 10,000 mg/kg. If aspirated (liquid enters lung), may be rapidly absorbed through the lungs and result in injury to other body systems.

EYE: May cause pain and irritation with transient corneal injury.

EFFECTS OF CHRONIC OVEREXPOSURE : **SKIN CONTACT:** Prolonged or repeated exposure may cause defatting of the skin and subsequent rash or irritation.
ALL ROUTES OF ENTRY: Based on available data, repeated exposures are not anticipated to cause any significant adverse effects. Birth defects are unlikely.
 Exposures having no adverse effects on the mother should have no effect on the fetus. In animal studies, has been shown not to interfere with reproduction. Results of in vitro ("test tube") mutagenicity tests have been negative. Results of mutagenicity tests in animals have been negative.

CARCINOGENICITY : Does not cause cancer in long term animal studies. Not a carcinogen or suspect carcinogen.

EMERGENCY AND FIRST AID PROCEDURES : **EYE:** Flush eyes gently with water for at least 15 minutes. Supportive treatment is recommended by physician.
SKIN: Wash with mild soap and water. Remove wetted clothing until dry.
INHALATION: Remove to fresh air. Individuals showing pronounced anesthetic effects may require artificial respiration and oxygen. Epinephrine and other drugs with similar activity should not be administered.
INGESTION: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

NOTES TO PHYSICIAN : **EYE:** May cause Conjunctivitis, stain for evidence of corneal injury.
SKIN: May cause mild irritation, chronic exposure, defatting type of Dermatitis, treat as any contact Dermatitis. Not likely to be absorbed in acutely toxic amounts.
RESPIRATORY: Anesthetic or narcotic effect may occur, administer oxygen if available. Bronchodilators, expectorants and antitussives may be of help.
ORAL: Low in toxicity. May cause reaction similar to petroleum or petroleum-like solvent. Danger of chemical pneumonia must be weighed against toxicity when considering emptying the stomach. If lavage is performed, suggest endotracheal and/or esophagoscopy control.
SYSTEMIC: May increase myocardial irritability. Avoid Epinephrine or similar acting drugs if at all possible. Consult standard literature. No specific antidote. Treatment based on the sound judgment of the physician and the individual reactions of the patient.

V. REACTIVITY DATA

STABILITY: The product is very stable under most conditions. Prolonged storage in contact with water may cause some decomposition and the formation of hydrochloric acid (when storing @ temperatures in excess of 150 F). Thermal decomposition begins at 325 C (625 F).

INCOMPATIBILITY: Magnesium and aluminum are attacked at elevated temperatures. Polystyrene, cellulose acetate propionate and polycarbonate plastics are dissolved. Softens asphalt, swells natural or Buna rubber.

HAZARDOUS DECOMPOSITION PRODUCTS: When exposed to open flames (welding torches) or high energy arcs, product may decompose yielding hydrogen chloride (HCL) gas.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: None

VI. DISPOSAL, SPILL OR LEAK PROCEDURES

AQUATIC TOXICITY : The product has a low biochemical oxygen demand (BOD), does not interfere with biological treatment, and is easily aerated out of water solutions. The odor threshold in water solution is 350 ppm.

SPILL OR LEAK PROCEDURES : Small Spills: Mop up, wipe up or soak up immediately. Remove to out-of-doors.
 Large Spills: Evacuate area. Contain liquid; transfer to closed metal (steel) containers. Keep out of water supply. Reportable Quantity: 90 Gallons (1000 lbs.)

WASTE DISPOSAL METHOD : Very small amounts may be evaporated in compliance with local, state and federal regulations including Subtitle C of the Resource Conservation and Recovery Act. Large quantities may be sent to a licensed reclaimer or permitted incinerators. Never dump into sewers, on the ground or into any body of water. "If inert absorbents are employed in spill containment or cleanup, these absorbents must be non-biodegradable materials if destined for landfill disposal. Suitable absorbents include natural minerals (clay), activated charcoal, man-made polymers (HD polyethylene)."

NEUTRALIZATION CHEMICALS : Product may be effectively absorbed with activated charcoal.

VII. SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS : Normal ventilation with regular use to maintain the TLV below recommended values (350 ppm).

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT : RESPIRATORY: None during normal use. When respiratory protection is required for certain operations, use an approved air purifying respirator. For emergency conditions where the exposure guideline may be greatly exceeded, use an approved positive pressure self-contained breathing apparatus.
EYES: Single safety glasses to cup-type goggles (precautionary measure due to machining operations).
GLOVES: Synthetic rubber gloves, aprons and overshoes may be necessary to prevent excessive skin contact when dealing with large spills (many gallons).
OTHER CLOTHING & EQUIPMENT: None required.

VIII. SPECIAL PRECAUTIONS

Use with adequate ventilation. Avoid prolonged or repeated breathing of vapors. Concentrated vapors are heavier than air and will collect in low areas such as pits, degreasers, storage tanks and other confined areas. Large amounts can displace oxygen in confined areas. Do not enter these areas where vapors are suspected unless special breathing apparatus is used and an observer is present for assistance. Avoid prolonged or repeated contact with skin. DO NOT TAKE INTERNALLY. At elevated temperatures, aluminum may be corroded and therefore, aluminum is not recommended for containers or handling equipment. Ideally, a cool, dry, well ventilated storage area should be selected, however, a properly sealed container may be stored under higher ambient temperatures (150 F) and humid conditions without concern.

IX. ADDITIONAL REGULATORY CONCERNS

1,1,1-trichloroethane has been included by the EPA in a list of chemical compounds designated as hazardous waste materials. This organic compound is highly volatile and readily evaporates to the atmosphere. As a consequence, the potential for contaminating an otherwise non-hazardous waste with 1,1,1-trichloroethane originating from TAP MAGIC consumed during various machining operations is small. RCRA hazardous waste no. U226.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Super Fund Amendment and Reauthorization Act of 1986 (Sara Title III) and is considered, under applicable definitions, to meet the following categories: **An immediate health hazard.** This product contains toxic chemicals as listed in 40 CFR 372.65: 1,1,1-trichloroethane and 1,2-butylene oxide. TAP MAGIC does not contain any chemical compound listed on the SARA list of "Extremely Hazardous Chemicals", and is in compliance with all of the requirements of the TSCA at the time of shipment.

ADDITIONAL INFORMATION: TAP MAGIC does not contain Nitrites, Nitrite Derivatives, Amines, Polynuclear Aromatic Compounds or Benzene either as ingredients or as trace contaminants. Shelf life is indefinite at ambient temperatures and left in original containers.

CAUTION: Any cutting fluid can be "overworked" or "overheated", causing it to break down. This overuse is identified by the sight of or strong odor of vapors or fumes not normally present. The effects of these vapors or fumes on human health have not been fully determined. After use of this product, clean and lubricate metal surfaces to avoid staining and/or corrosion.

Prepared By : Asa L. Morton
Title : Chief Chemist
Company : American Interplex Corporation
Little Rock, AR 72204
Telephone : (501) 224-5060



MATERIAL SAFETY DATA SHEET

Section 1: Product & Company Identification

Product Name: CRC® Wasp and Hornet Killer PLUS™

Product Number (s): 14010

Product Use: Wasp and hornet insecticide

Manufacturer / Supplier Contact Information:

In United States:

CRC Industries, Inc.

885 Louis Drive

Warminster, PA 18974

www.crcindustries.com

1-215-674-4300 (General)

(800) 521-3168 (Technical)

(800) 272-4620 (Customer Service)

In Canada:

CRC Canada Co.

2-1246 Lorimar Drive

Mississauga, Ontario L5S 1R2

www.crc-canada.ca

1-905-670-2291

In Mexico:

CRC Industries Mexico

Av. Benito Juárez 4055 G

Colonia Orquídea

San Luís Potosí, SLP CP 78394

www.crc-mexico.com

52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview

CAUTION: Flammable. Harmful or Fatal if Swallowed. Eye Irritant. Contents Under Pressure.
Appearance & Odor: Clear liquid, petroleum odor

Potential Health Effects:

ACUTE EFFECTS:

EYE: May cause moderate eye irritation.

SKIN: May cause skin irritation. Prolonged contact may allow material to be absorbed through the skin.

INHALATION: May cause respiratory irritation. Overexposure to vapors may lead to central nervous system effects such as headache and drowsiness, followed by dizziness and nausea.

INGESTION: May cause gastrointestinal discomfort or irritation of the throat. Aspiration of this material into the lungs, either while swallowing or vomiting, may lead to chemical pneumonitis, which could be fatal. Signs of lung involvement include increased respiratory rate, increased heart rate, and a bluish discoloration of the skin.

CHRONIC EFFECTS: Repeated skin contact may cause contact dermatitis.

TARGET ORGANS: Central nervous system

Medical Conditions Aggravated by Exposure: pre-existing skin conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.

Product Name: CRC® Wasp and Hornet Killer PLUS™
Product Number (s): 14010

Section 3: Composition/Information on Ingredients

COMPONENT	CAS NUMBER	% by Wt.
Hydrotreated light distillate	64742-47-8	90 - 100
Tetramethrin	7696-12-0	0.200
Phenothrin	26002-80-2	0.125
Carbon dioxide	124-38-9	1 - 5

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Do NOT induce vomiting due to aspiration hazard. If vomiting occurs, lower head below knees to avoid aspiration. Seek immediate medical attention.

Note to Physicians: Treat symptomatically.

Section 5: Fire-Fighting Measures

Flammable Properties: This product is flammable in accordance with aerosol flammability definitions. (See 16 CFR 1500.3(c)(6)).

Flash Point: 205°F / 96°C (PMCC)	Upper Explosive Limit: 5.0
Autoignition Temperature: ND	Lower Explosive Limit: 0.7

Fire and Explosion Data:

Suitable Extinguishing Media: Use extinguishers appropriate for a Class B fire.

Products of Combustion: Oxides of carbon

Explosion Hazards: Aerosol containers, when exposed to heat from fire, may build pressure and explode.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.

Methods for Containment & Clean-up: Dike area to contain spill. Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate

Product Name: CRC® Wasp and Hornet Killer PLUS™

Product Number (s): 14010

respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

Section 7: Handling and Storage

Handling Procedures: Avoid breathing vapors. Use outside or with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not use near sparks, open flames or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Aerosol cans must be maintained below 120°F / 49°C to prevent cans from rupturing.

Aerosol Storage Level: III

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines:

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA	STEL	TWA	SOURCE	
Hydrotreated light distillate	NE	NE	NE	NE	NE		
Tetramethrin	NE	NE	NE	NE	NE		
Phenothrin	NE	NE	NE	NE	NE		
Carbon dioxide	5000	NE	5000	30000	NE		ppm
N.E. – Not Established (c) – ceiling (s) – skin (v) – vacated							

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as neoprene or nitrile. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

Section 9: Physical and Chemical Properties

Physical State: liquid
Color: clear
Odor: petroleum

Product Name: CRC® Wasp and Hornet Killer PLUS™**Product Number (s): 14010**

Odor Threshold: ND
 Specific Gravity: 0.79
 Initial Boiling Point: 435°F / 224°C
 Freezing Point: ND
 Vapor Pressure: < 0.1 mmHg @ 68°F / 20°C
 Vapor Density: > 2 (air = 1)
 Evaporation Rate: slow
 Solubility: negligible in water
 Coefficient of water/oil distribution: ND
 pH: NA
 Volatile Organic Compounds: wt %: 1.4 g/L: 11.06 lbs./gal: 0.09

Section 10: Stability and Reactivity

Stability: Stable
 Conditions to Avoid: Temperature extremes; sources of ignition
 Incompatible Materials: Strong acids, bases and oxidizers
 Hazardous Decomposition Products: Oxides of carbon
 Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

<u>Component</u>	<u>Oral LD50</u> (rat)	<u>Dermal LD50</u>	<u>Inhalation LC50</u> (rat)
Hydrotreated light distillate	> 5 g/kg	> 2 g/kg (rabbit)	> 5 mg/L/4H
Active ingredient mixture	> 6.31 g/kg	> 2 g/kg (rat)	> 5.34 mg/L
Carbon dioxide	No data	No data	470,000 ppm/30M

Chronic Toxicity:

<u>Component</u>	<u>OSHA Carcinogen</u>	<u>IARC Carcinogen</u>	<u>NTP Carcinogen</u>	<u>Irritant</u>	<u>Sensitizer</u>
Hydrotreated light distillate	No	No	No	E (mild) / S (moderate)	Unknown
Active ingredient mixture	No	No	No	E & R (mild) / S (moderate)	No
Carbon dioxide	No	No	No	No	No

E – Eye	S – Skin	R - Respiratory
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Reproductive Toxicity: No information available
Teratogenicity: No information available
Mutagenicity: No information available
Synergistic Effects: No information available

Product Name: CRC® Wasp and Hornet Killer PLUS™
Product Number (s): 14010

Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: No information available
Persistence / Degradability: No information available
Bioaccumulation / Accumulation: No information available
Mobility in Environment: No information available

Section 13: Disposal Considerations

Waste Classification: The dispensed liquid product is not a RCRA hazardous waste. Full or partial full containers should be punctured and drained. Empty containers may be recycled or discarded. Contact your state or local regulatory agency for more details.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

Section 14: Transport Information

US DOT (ground): Consumer Commodity, ORM-D
ICAO/IATA (air): Consumer Commodity, ID8000, 9
IMO/IMDG (water): Aerosols, UN1950, 2.1, Limited Quantity
Special Provisions: None

Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: None

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:	Fire Hazard	Yes
	Reactive Hazard	No
	Release of Pressure	Yes
	Acute Health Hazard	Yes
	Chronic Health Hazard	No

Product Name: CRC® Wasp and Hornet Killer PLUS™

Product Number (s): 14010

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
Tetramethrin (0.200%), Phenothrin (0.125%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): None

Occupational Safety and Health Administration:

This product is regulated by the Hazard Communications Standard.

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: None

Consumer Products VOC Regulations: In states with consumer products VOC regulations, this product is compliant under the following categories: Wasp & Hornet Insecticide and Crawling Bug Insecticide

State Right to Know:

New Jersey: 7696-12-0, 26002-80-2, 95-63-6 (< 0.5%)
Pennsylvania: 95-63-6 (< 0.5%)
Massachusetts: None
Rhode Island : None

Canadian Regulations:

Controlled Products Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: A, B5, D2B

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

European Union Regulations:

RoHS Compliance: This product is compliant with Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

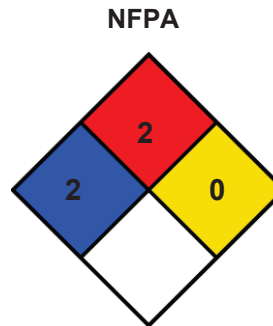
Additional Regulatory Information: EPA (FIFRA) Registration # 55809-3. This product is registered in all 50 United States and Puerto Rico. Wasp and Hornet Killer PLUS™ is not registered and cannot be sold outside of the United States and Puerto Rico.

Product Name: CRC® Wasp and Hornet Killer PLUS™

Product Number (s): 14010

Section 16: Other Information

HMIS® (II)	
Health:	2
Flammability:	2
Reactivity:	0
PPE:	B



Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick
CRC #: 431J
Revision Date: 10/05/2011

Changes since last revision: Section 15: Additional regulatory information

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Service
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substance List
g/L: grams per Liter
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
IMO: International Maritime Organization
lbs./gal: pounds per gallon
LC: Lethal Concentration
LD: Lethal Dose

NA: Not Applicable
ND: Not Determined
NIOSH: National Institute of Occupational Safety & Health
NFPA: National Fire Protection Association
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PMCC: Pinsky-Martens Closed Cup
PPE: Personal Protection Equipment
ppm: Parts per Million
RoHS: Restriction of Hazardous Substances
STEL: Short Term Exposure Limit
TCC: Tag Closed Cup
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information System



Material Safety Data Sheet

1 - Chemical Product and Company Identification

Manufacturer: WD-40 Company Address: 1061 Cudahy Place (92110) P.O. Box 80607 San Diego, California, USA 92138 -0607 Telephone: Emergency only: 1-888-324-7596 (PROSAR) Information: 1-888-324-7596 Chemical Spills: 1-800-424-9300 (Chemtrec) 1-703-527-3887 (International Calls)	Chemical Name: Organic Mixture Trade Name: WD-40 Aerosol Product Use: Lubricant, Penetrant, Drives Out Moisture, Removes and Protects Surfaces From Corrosion MSDS Date Of Preparation: 6/8/12
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2 – Hazards Identification

Emergency Overview: DANGER! Flammable aerosol. Contents under pressure. Harmful or fatal if swallowed. If swallowed, may be aspirated and cause lung damage. May cause eye irritation. Avoid eye contact. Use with adequate ventilation. Keep away from heat, sparks and all other sources of ignition. Symptoms of Overexposure: Inhalation: High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal. Skin Contact: Prolonged and/or repeated contact may produce mild irritation and defatting with possible dermatitis. Eye Contact: Contact may be irritating to eyes. May cause redness and tearing. Ingestion: This product has low oral toxicity. Swallowing may cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death. Chronic Effects: None expected. Medical Conditions Aggravated by Exposure: Preexisting eye, skin and respiratory conditions may be aggravated by exposure. Suspected Cancer Agent: Yes No <input checked="" type="checkbox"/>
--

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent
Aliphatic Hydrocarbon	64742-47-8	45-50
Petroleum Base Oil	64742-58-1 64742-53-6 64742-56-9 64742-65-0	<25
LVP Aliphatic Hydrocarbon	64742-47-8	12-18
Carbon Dioxide	124-38-9	2-3
Non-Hazardous Ingredients	Mixture	<10

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately. Eye Contact: Flush thoroughly with water. Remove contact lenses if present after the first 5 minutes and continue flushing for several more minutes. Get medical attention if irritation persists. Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.
--

Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

5 – Fire Fighting Measures

Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Do not use water jet or flooding amounts of water. Burning product will float on the surface and spread fire.

Special Fire Fighting Procedures: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

Unusual Fire and Explosion Hazards: Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

6 – Accidental Release Measures

Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area. Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

Storage: Store in a cool, well-ventilated area, away from incompatible materials. Do not store above 120°F or in direct sunlight. U.F.C (NFPA 30B) Level 3 Aerosol.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Aliphatic Hydrocarbon	1200 mg/m ³ TWA (manufacturer recommended)
Petroleum Base Oil	5 mg/m ³ TWA, 10 mg/m ³ STEL ACGIH TLV 5 mg/m ³ TWA OSHA PEL
LVP Aliphatic Hydrocarbon	1200 mg/m ³ TWA (manufacturer recommended)
Carbon Dioxide	5000 ppm TWA (OSHA/ACGIH), 30,000 ppm STEL (ACGIH)
Non-Hazardous Ingredients	None Established

The Following Controls are Recommended for Normal Consumer Use of this Product

Engineering Controls: Use in a well-ventilated area.

Personal Protection:

Eye Protection: Avoid eye contact. Always spray away from your face.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Personal Protection:

Eye Protection: Safety goggles recommended where eye contact is possible.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Boiling Point:	361 - 369°F (183 - 187°C)	Specific Gravity:	0.8 – 0.82 @ 60°F
Solubility in Water:	Insoluble	pH:	Not Applicable
Vapor Pressure:	95-115 PSI @ 70°F	Vapor Density:	Greater than 1
Percent Volatile:	70-75%	VOC:	412 grams/liter (49.5%)
Coefficient of Water/Oil Distribution:	Not Determined	Appearance/Odor	Light amber liquid/mild odor
Flash Point:	122°F (49°C) Tag Open Cup (concentrate)	Flammable Limits: (Solvent Portion)	LEL: 0.6% UEL: 8.0%
Pour Point:	-63°C (-81.4°F) ASTM D-97	Kinematic Viscosity:	2.79-2.96cSt @ 100°F

10 – Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition. Do not puncture or incinerate containers.

Incompatibilities: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.

11 – Toxicological Information

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard. None of the components of this product is listed as a carcinogen or suspected carcinogen or is considered a reproductive hazard.

12 – Ecological Information

No data is currently available.

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations.

14 – Transportation Information

DOT Surface Shipping Description: Consumer Commodity, ORM-D

After 1/1/2014 UN1950, Aerosols, 2.1 Ltd. Qty (Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)

IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY

ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1 NOTE: WD-40 does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

15 – Regulatory Information

U.S. Federal Regulations:

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category For Section 311/312: Acute Health, Fire Hazard, Sudden Release of Pressure

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): This product does not contain chemicals regulated under California Proposition 65.

VOC Regulations: This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

Canadian Environmental Protection Act: One of the components is listed on the NDSL. All of the other ingredients are listed on the Canadian Domestic Substances List or exempt from notification.

Canadian WHMIS Classification: Class B-5 (Flammable Aerosol)

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

16 – Other Information:

HMIS Hazard Rating:

Health – 1 (slight hazard), Fire Hazard – 4 (severe hazard), Reactivity – 0 (minimal hazard)

SIGNATURE: _____



TITLE: Adm. Scientific Manager

REVISION DATE: June 2012

SUPERSEDES: March 2010

ITW Permatex
 10 Columbus Blvd.
 Hartford, CT 06106 USA
 Telephone: 1-87-Permatex
 (877) 376-2839
 Emergency: 800-255-3924 (ChemTel)
 International Emergency: +01-813-248-0585

Material Safety Data Sheet

1. PRODUCT IDENTIFICATION

Product Name: 195DA WHITE LITHIUM GREASE 10.75OZ AE
Item No: 81981
Product Type: Aerosol lubricant

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight%	ACGIH; TLV-TWA	OSHA PEL
DISTILLATES (PETROLEUM), SOLVENT-REFINED HEAVY NAPHTHENIC 64741-96-4	15-40	Not listed	Not listed
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC 64742-52-5	15-40	Not listed	Not listed
PROPANE 74-98-6	15-40	1000 ppm	1000 ppm; 1800 mg/m ³
HEPTANE 142-82-5	<20	400 ppm	500 ppm; 2000 mg/m ³

3. HAZARDS IDENTIFICATION

Toxicity: May cause eye, skin and respiratory irritation. Intentional misuse by concentrating and inhaling the vapor may be harmful or fatal. High concentrations may cause central nervous system (CNS) depression.

Primary Routes of Entry: Eye and skin contact, ingestion, inhalation

Signs and Symptoms of Exposure: Excessive accidental exposure may cause headache, dizziness, nausea and mild respiratory irritation. May cause redness to eyes and irritation to nasal passages.

Aggravated Medical Condition: Preexisting eye, skin and respiratory disorders may be aggravated by overexposure to this product.

4. FIRST AID MEASURES

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Oxygen or artificial respiration if needed. Obtain medical attention.

Skin Contact: Wash off with soap and water. If skin irritation persists, call a physician.

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flash Point °F(C°): Flammable aerosol per flame projection

Recommended Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam.

Special Fire-Fighting Procedures: Firefighters should wear self-contained breathing apparatus. Keep containers cool. Use equipment or shielding required to protect against bursting or venting of containers. Water spray may be ineffective on flames but should be used to keep fire-exposed containers cool.

Hazardous Products of Combustion: Oxides of carbon

Unusual Fire/Explosion Hazards: Contents under pressure. Exposure to temperatures over 120 degrees F. may cause bursting or venting. Use equipment or shielding to protect personnel from bursting containers.

Lower Explosive Limit: Not determined

Upper Explosive Limit: Not determined

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Eliminate all sources of ignition. Maintain good ventilation. Take up with an inert absorbent. Store in a closed waste container until disposal.

7. HANDLING AND STORAGE

Storage: Store away from heat, sparks or open flame. Do not store at temperatures above 100°F (38°C). Exposure to high temperatures may cause container to burst.

Handling: Do not use near heat, sparks or open flame. Do not puncture or incinerate container. Use only in a well ventilated area. Intentionally concentrating and inhaling the vapor may be harmful or fatal. Avoid contact with skin and eyes. Wash hands before eating and smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eyes: Safety glasses.

Skin: Neoprene or nitrile gloves recommended.

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their exposure limits (or to the lowest feasible levels when limits have not been established) during the use of this product.

Respiratory Protection: An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White liquid
Odor: Solvent
Boiling Point: >100°F
pH: Does not apply
Solubility in Water: Nil
Specific Gravity: 0.885
VOC(Wt.%): 37.8%
Vapor Pressure: Not Determined
Vapor Density (Air=1): >1
Evaporation Rate: <1 (butyl acetate = 1)

10. STABILITY AND REACTIVITY

Chemical Stability: Stable at normal conditions

Hazardous Polymerization: Will not occur

Incompatibilities: Strong oxidizers

Conditions to Avoid: Keep away from heat, sparks and open flame. - No smoking.

Hazardous Products of Combustion: Oxides of carbon

11. TOXICOLOGICAL INFORMATION

See Section 3

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended Method of Disposal: Disposal should be made in accordance with federal, state and local regulations. This container may be recycled in aerosol recycling centers. Before offering for recycling, empty the can by using the product according to the label. If recycling is not available, wrap the container and discard in the trash.

US EPA Waste Number: D001 as per 40CFR 261.21

14. TRANSPORTATION INFORMATION

DOT (49CFR 172)

U.S. Department of Transportation - DOT - 49 CFR (Ground)

DOT Shipping Name: Aerosols, Limited Quantity

Hazard Class: Class 2.1

UN/ID Number: UN 1950

IATA (Air)

Proper Shipping Name: Consumer Commodity (Not more than 1 liter)

Class or Division: Class 9

UN/ID Number: ID 8000

Product Name: 195DA WHITE LITHIUM GREASE 10.75OZ
AE

Item No. 81981

IMDG (Vessel)

Proper Shipping Name: Aerosols, Limited Quantity
Hazard Class: Class 2.1
UN Number: UN 1950

Marine Pollutant: None

15. REGULATORY INFORMATION

SARA 313 Chemicals: The following component(s) is listed as a SARA Section 313 Toxic Chemical.

None

California Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm

TSCA Inventory Status: All components of this product are listed (or exempt) on the EPA TSCA inventory.

16. OTHER INFORMATION

Estimated NFPA Rating: HEALTH 2, FLAMMABILITY 4, REACTIVITY 1.

Estimated HMIS Classification: HEALTH 2, FLAMMABILITY 4, PHYSICAL HAZARD 0

(NFPA is a registered trademark of the National Fire Protection Association)

HMIS is a registered trademark of the National Paint and Coatings Association

Prepared By: Denise Boyd, Manager-Environmental, Health & Safety
Company: ITW Permatex 10 Columbus Blvd. Hartford, CT USA 06106
Telephone No.: 1-87-Permatex (877) 376-2839

Revision Date: March 08, 2012

Revision Number: 2

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



WINDEX® ORIGINAL GLASS CLEANER

Version 1.

Print Date 01/22/2009

Revision Date 01/16/2009

MSDS Number 350000004274

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Trade name : WINDEX® ORIGINAL GLASS CLEANER

Use of the Substance/Preparation : Hard Surface Cleaner

Company : S.C. Johnson & Son, Inc.
1525 Howe Street
Racine WI 53403-2236

Emergency telephone : 24 Hour Transport & Medical Emergency Phone (866) 231-5406
24 Hour International Emergency Phone (952) 852-4647

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance / Odor : blue / liquid / characteristic

Immediate Concerns : Avoid contact with skin, eyes and clothing.

Potential Health Effects

Routes of exposure : Eye, Skin, Inhalation, Ingestion.

Eyes : None known.

Skin : None known.

Inhalation : None known.

Ingestion : None known.

Aggravated Medical Condition : None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Weight %
Water	7732-18-5	60.00 - 100.00
Isopropanol	67-63-0	1.00 - 5.00
Ethylene glycol Monohexylether	112-25-4	0.10 - 1.00

4. FIRST AID MEASURES

Eye contact : Rinse with plenty of water. Get medical attention if irritation

Material Safety Data Sheet

according to ANSI Z400.1- 2004 and 29 CFR 1910.1200



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	develops and persists.
Skin contact	: Wash off with soap and water. Get medical attention if irritation develops and persists.
Inhalation	: Remove to fresh air.
Ingestion	: Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Alcohol foam, carbon dioxide, dry chemical, water fog
Specific hazards during fire fighting	: Container may melt and leak in heat of fire.
Further information	: Although this product has a flash point below 200 Deg F, it is an aqueous solution containing an alcohol and does not sustain combustion. Standard procedure for chemical fires. Wear full protective clothing and positive pressure self-contained breathing apparatus.
Flash point	: 130 °F Method: Tag Closed Cup (TCC)
Flash point	: 54 °C Method: Tag Closed Cup (TCC)
Lower explosion limit	: Note: no data available
Upper explosion limit	: Note: no data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	: Remove all sources of ignition.
Methods for cleaning up	: Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Dike large spills.

7. HANDLING AND STORAGE

Handling

Advice on safe handling : KEEP OUT OF REACH OF CHILDREN AND PETS.

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Use only as directed.

Advice on protection against fire and explosion : Keep away from heat and sources of ignition.

Storage

Requirements for storage areas and containers : Keep container closed when not in use.
Keep in a dry, cool and well-ventilated place.
Do not freeze.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components	CAS-No.	mg/m ³	ppm	Basis
Isopropanol	67-63-0	-	400 ppm	ACGIH STEL
Isopropanol	67-63-0	-	200 ppm	ACGIH TWA
Isopropanol	67-63-0	980 mg/m ³	400 ppm	OSHA TWA

Personal protective equipment

Respiratory protection

Industrial setting : No personal respiratory protective equipment normally required.

Household setting : No personal respiratory protective equipment normally required.

Hand protection

Industrial setting : not required under normal use

Household setting : not required under normal use

Eye protection

Industrial setting : No special requirements.

Household setting : No special requirements.

Hygiene measures : Use only with adequate ventilation. Wash thoroughly after handling. Substantial amounts of mist/vapors can be controlled with local exhaust ventilation or respiratory protection. Wear suitable protective clothing.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	liquid
Color	:	blue
Odor	:	characteristic
pH	:	10.5 - 11.0
Melting point	:	no data available
Boiling point	:	no data available
Freezing point	:	no data available
Flash point	:	130 °F Method: Tag Closed Cup (TCC)
Flash point	:	54 °C Method: Tag Closed Cup (TCC)
Evaporation rate	:	no data available
Autoignition temperature	:	no data available
Lower explosion limit	:	no data available
Upper explosion limit	:	no data available
Vapour pressure	:	similar to water
Water solubility	:	completely soluble
Partition coefficient: n-octanol/water	:	no data available
Specific Gravity	:	1.0 estimated

10. STABILITY AND REACTIVITY

Conditions to avoid	:	None known.
Materials to avoid	:	Strong oxidizing agents
Hazardous decomposition products	:	When exposed to fire, produces normal products of combustion.

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Hazardous reactions : Stable

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50
Dose: estimated > 5,000 mg/kg

Acute inhalation toxicity : LC50 rat
Dose: > 2.5 mg/l

Acute dermal toxicity : LD50 rabbit
Dose: estimated > 2,000 mg/kg

Chronic effects

Carcinogenicity : no data available

Mutagenicity : no data available

Reproductive effects : no data available

Teratogenicity : no data available

Sensitisation : Not known to be a sensitizer.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects : Not Available

13. DISPOSAL CONSIDERATIONS

Industrial setting : Observe all applicable Federal, Provincial and State regulations and Local/Municipal ordinances regarding disposal.

Household setting : Consumer may discard empty container in trash, or recycle where facilities exist.

14. TRANSPORT INFORMATION

Land transport

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U.S. DOT and Canadian TDG Surface Transportation:

NA number 1993
Proper shipping name Combustible Liquid, N.O.S.
Class: Combustible liquid
Packaging group: III

Note: SC Johnson ships this product as "Non-Regulated" per DOT exception for Combustible Liquids. (49 CFR 173.150)

Sea transport

IMDG:

UN-Number: None.
Packaging group: None.
Proper shipping name not regulated
Class: None.

Air transport

ICAO/IATA:

Class: None.
Packaging group: None.
Proper shipping name not regulated
UN/ID No.: None.

15. REGULATORY INFORMATION

Global Chemical Inventories

Notification status : All ingredients of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

: All ingredients of this product comply with the New Substances Notification requirements under the Canadian Environmental Protection Act (CEPA).

California Prop. 65 : This product is not subject to the reporting requirements under California's Proposition 65.
: This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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16. OTHER INFORMATION

HMIS Ratings

Health	0
Flammability	2
Reactivity	0

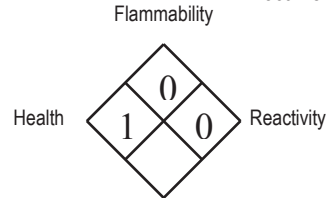
NFPA Ratings

Health	0
Fire	2
Reactivity	0
Special	

Further information

This document has been prepared using data from sources considered to be technically reliable. It does not constitute a warranty, expressed or implied, as to the accuracy of the information contained herein. Actual conditions of use are beyond the seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

Prepared by:	SC Johnson Global Safety Assessment & Regulatory Affairs (GSARA)
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HMIS Rating
 WHMIS Hazard
 Class: Non-Hazardous

MATERIAL SAFETY DATA SHEET

GENERAL INFORMATION

PRODUCT NAME OR NUMBER (as it appears on label) YELLOW 77[®] Wire Pulling Lubricant	CATALOG NUMBER All "31" Series
MANUFACTURER'S NAME IDEAL INDUSTRIES, INC.	EMERGENCY TELEPHONE NO. (815) 895-5181
ADDRESS (Number, Street, City, State, Zip Code) Becker Place, Sycamore, IL 60178	
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101) None	
CHEMICAL DESCRIPTION Water-Wax Emulsion	FORMULA Proprietary

SECTION I - INGREDIENTS

CAS REGISTRY NO.	%W	CHEMICAL NAME(S)*	Listed as a carcinogen in NTP, IARC or OSHA 1910(z) (specify)
7732-18-5	<90	Water	No
64742-43-4	<5	Paraffin Wax	No
8009-03-8	<3	Petrolatum	No
64742-53-6	<3	Napthenic Mineral Oil (See *A)	No
9005-08-7	<4	Polyethylene Glycol Ester	No
61791-44-4	<1	Ethoxylated Tallow Amine	No
25265-71-8	<0.1	Perfume	No
8042-47-5 24838-91-8	<1	Acrylamide Sodium Acrylate Copolymer with Trideceth-6	No
52-51-7	<0.1	Antimicrobial Agent	No
6358-31-2	<0.1	Yellow Pigment	No

SECTION II - PHYSICAL DATA

BOILING POINT 212°F 100°C	SPECIFIC GRAVITY (H ₂ O=1) 0.98	PERCENT VOLATILE BY VOLUME (%) <90
SOLUBILITY IN WATER Moderate	pH = 7.0 - 8.5	PERCENT SOLID BY WEIGHT (%) ~20
APPEARANCE AND ODOR Yellow paste, slight perfume odor	IS MATERIAL: LIQUID SOLID GEL GAS <u>PASTE</u> POWDER	

SECTION III - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT None	method used C.O.C	FLAMMABLE LIMITS	LEL None	UEL None
EXTINGUISHING MEDIA Use extinguishing media suitable for surrounding materials				
SPECIAL FIRE FIGHTING PROCEDURES Self-contained respiratory protection should be provided for fire fighters. Keep fire exposed containers cool with water.				
UNUSUAL FIRE AND EXPLOSION HAZARDS None				

* None of the chemical raw materials contained in this formulation are considered hazardous under the Federal Hazards Communication Standard 29 C. F. R 1910.1200

*A Oil is Severely hydrotreated with a polymorphonuclear content at less than 0.1% and meets OSHA 29 C.F.R. 1910.1200.

SECTION IV - HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE - Conditions to Avoid	
None normally expected. Upon prolonged contact, may cause temporary eye discomfort.	
THRESHOLD LIMIT VALUE	
N.E.	
PRIMARY ROUTES OF ENTRY Inhalation <input type="checkbox"/> Skin Contact <input checked="" type="checkbox"/> Other (specify)	
EMERGENCY FIRST AID PROCEDURES	
SKIN CONTACT:	Wash with soap and water for 15 minutes.
EYE CONTACT:	Flush with water for 15 minutes. Inhalation - Move to fresh air.
INGESTION:	Induce vomiting. Consult physician or local poison control center.

SECTION V - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	None
INCOMPATIBILITY (materials to avoid)			
Avoid strong oxidizers.			
HAZARDOUS DECOMPOSITION PRODUCTS:			
Excessive heat and burning may release oxides of carbon and nitrogen.			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	None

SECTION VI - SPILL AND LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED	
Wipe up, shovel or vacuum spilled material. Clean up spills immediately as they can be dangerously slippery.	
WASTE DISPOSAL METHOD	
Comply with Federal, state and local regulations for solid landfill.	
CERCLA (Superfund) REPORTABLE QUANTITY (in lbs)	
None Required	
RCRA HAZARDOUS WASTE NO. (40CFR 261.33)	
None Required	
VOLATILE ORGANIC COMPOUND (VOC) (as packaged, minus water)	
2.7 gms / ltr	
^a Theoretical ____ lb/gal	N/A
^b Analytical ____ lb/gal	N/A

SECTION VII - PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type)			
None normally required.			
VENTILATION	LOCAL EXHAUST (Specify Rate)	None	SPECIAL
	MECHANICAL (General) (Specify Rate)		None
		Recommended in closed areas.	
PROTECTIVE GLOVES (specify type)		EYE PROTECTION (specify type)	
None normally needed -Neoprene if necessary		Safety glasses or splash goggles.	
OTHER PROTECTIVE EQUIPMENT			
Eye fountain in work area is recommended.			

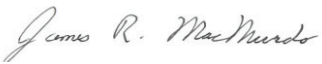
SECTION VIII - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	
Store at temperatures between 40 - 120° F. Avoid freezing.	
OTHER PRECAUTIONS	
Keep away from children, infants and pets.	

SECTION IX - ADDITIONAL INFORMATION

If material is used in extreme heat (>120° F), prolonged and repeated exposure could pose a risk of pulmonary disease. Exposure below mist TLV (5mg/m) appears to be without risk.	
All components used in this product are exempt from the T.O.S.C.A chapter 15 reporting requirements.	
N/A = Not Applicable, N.E. = None Established	

THIS MATERIAL SAFETY DATA SHEET PREPARED BY:

NAME	James R. MacMurdo	SIGNATURE
TITLE	Mgr., Corporate Quality Systems	
DATE	12/6/2011	