

# MATERIAL SAFETY DATA SHEET

## DAUBERT CHEMICAL COMPANY

4700 SOUTH CENTRAL AVENUE  
CHICAGO, ILLINOIS 60638  
TELEPHONE: (708) 496-7350  
FAX: (708) 496-7367

EMERGENCY CONTACT:  
CHEMTREC (800) 424-9300

## HMIS HAZARD RATING

|                     |   |
|---------------------|---|
| Health              | 0 |
| Fire                | 1 |
| Reactivity          | 0 |
| Personal Protection | B |

Date of Review: February 10, 2009  
Date of Preparation: February 21, 2003

Revised: February 10, 2009  
By: M. Hogan

## SECTION 1: PRODUCT IDENTIFICATION

Product Name: **Daubond Purge**  
Chemical Family: Modified Ethylene-Vinyl Acetate Copolymer  
Material Usage: Cleaning Agent for Hot Melt Equipment

**EMERGENCY OVERVIEW:** When product burns it releases typical hydrocarbon products of combustion. Refer to Section 3 for health effects and to Section 5 for fire hazard data.

## SECTION 2: HAZARDOUS INGREDIENTS

| Component | Wt% | Recommended Exposure Limits (TWA) |
|-----------|-----|-----------------------------------|
| None      |     |                                   |

## SECTION 3: HEALTH HAZARD INFORMATION

**Primary Routes of Entry:** Inhalation

**Acute Effects:** Not irritating to eyes or skin. No sensitizing effects known.

**Chronic Effects:** None known. When melted and applied, vapors are released and an unpleasant odor can occur, even if the recommended working temperature has been observed. Moreover, if the prescribed working temperature is exceeded over a longer period, harmful decomposition products can develop. Precautions should be taken to eliminate the vapors, e.g. by using a suitable ventilation system.

**Carcinogenicity:** Group 3 (not classifiable as to carcinogenicity to humans; Vol.19, Suppl.7, Vol.71; 1999).

**Pre-Existing Medical Conditions Aggravated by Exposure:** Exposure may aggravate pre-existing respiratory or skin problems.

## SECTION 4: FIRST AID PROCEDURES

**Inhalation:** Move victim to fresh air and call emergency medical care. If not breathing, give artificial respiration; if breathing is difficult, give oxygen.

**Eyes:** In case of contact with material, immediately flush eyes with running water for at least 15 minutes. Seek immediate medical attention.

**Skin:** Wash skin with soap and water. Remove and isolate contaminated clothing and shoes at the site.

**Ingestion:** DO NOT INDUCE VOMITING. Consult a physician. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

## SECTION 5: FIRE AND EXPLOSION HAZARD DATA

**Flash Point:** >200 °F (TCC)

**Explosive Limits:** LEL = Not Determined UEL = Not Determined

### EXTINGUISHING MEDIA:

**Small Fires:** Dry chemical, CO<sub>2</sub>, water fog, or alcohol resistant foam.

**Large Fires:** Water fog or alcohol resistant foam. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of tanks. For massive fire in cargo area, use unmanned hose holder or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire.

**Special Firefighting Protection/Emergency Action:** Fire may produce irritating or poisonous gases. Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide limited protection. Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Isolate for 1/2 mile in all directions if tank, rail car or tank truck is involved in fire. If runoff from fire control occurs, notify the appropriate authorities.

**Unusual Fire/Explosion Hazards:** None known.

**Products of Combustion:** Carbon monoxide, carbon dioxide, miscellaneous hydrocarbons.

## SECTION 6: SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

**Steps to be taken in case Material is Released or Spilled:** Shut off ignition sources; no flares, smoking or flames in hazard area. Stop leak if you can do it without risk.

**Small Spills:** Take up with sand or other noncombustible absorbent material and place into containers for later disposal.

**Large Spills:** Dike far ahead of liquid spill for later disposal.

## SECTION 7: SAFE HANDLING INFORMATION

**Precautions To Be Taken In Handling/Storage:** Store in cool, well-ventilated area. Keep away from flames, sparks or hot surfaces. Never use a torch to cut or weld on or near container. Empty containers can contain explosive vapors.

**Other Precautions:** Never wear contaminated clothing. Launder or dry clean before wearing. Discard oil-soaked shoes. Wash thoroughly with soap and water (waterless hand cleaner may be helpful in removing residues) after use and before smoking or eating. Avoid excessive skin contact.

## SECTION 8: EXPOSURE CONTROLS

### Specific Personal Protective Equipment:

Respiratory: For mists or fumes, use approved organic respirator.

Eyes: Safety glasses or splash goggles.

Dermal: Impervious, heat protective gloves.

Other Clothing or Equipment: Garments to protect from melted hot wax.

**NOTE:** Product application is at elevated temperature (>200 °F). This may cause a thermal hazard and all proper precautions should be taken to avoid contact with hot material.

## SECTION 9: REACTIVITY HAZARD DATA

**Stability:** Stable

**Incompatibility:** Strong acids, oxidizing agents.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, and miscellaneous hydrocarbons.

**Hazardous Polymerization:** Will not occur.

## SECTION 10: PHYSICAL AND CHEMICAL PROPERTIES

|                                |                |                            |                |
|--------------------------------|----------------|----------------------------|----------------|
| Color:                         | Blue           | Vapor Density (air=1):     | >1             |
| Appearance:                    | Solid          | Solubility in Water:       | Negligible     |
| Odor:                          | Mild           | Specific Gravity:          | 1.0 ± .02      |
| Boiling Point (initial):       | N/D            | pH:                        | Not Applicable |
| Evaporation Rate               | Not Applicable | Percent Volatile by Volume | <1             |
| Vapor Pressure (mmHg @ 20 °C): | Not Determined | Melt Point                 | 185°F          |

## SECTION 11: DISPOSAL CONSIDERATIONS

**Waste Disposal Methods:** Dispose of in accordance with state, local and federal regulations. Materials may become a hazardous waste through use. If permitted, incineration may be practiced.

## SECTION 12: REGULATORY INFORMATION

Volatile Organic Content: (Calculated Values)

VOC per gallon: Nil

VOC per gallon minus exempt solvents & water: Nil

EPA Hazardous Waste Number(s) (40 CFR Part 261): Not Applicable

EPA Hazard Category (40 CFR Part 370): IMMEDIATE (ACUTE)

### SARA TITLE III:

This product contains the following TOXIC CHEMICALS subject to the Reporting Requirements of Sec. 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and of 40 CFR Part 372:

| Chemical | CAS No. | Wt% |
|----------|---------|-----|
|----------|---------|-----|

NONE

This product contains the following EXTREMELY HAZARDOUS SUBSTANCE(S) subject to Emergency

Daubond Purge [8026]

2/10/09

Page 3 of 4

Planning Requirements under Sec. 301-303 (40 CFR Parts 300 and 355) and Emergency Release Notification Requirements under Sec. 304:

| <u>Chemical</u> | <u>CAS No.</u> | <u>Wt%</u> | <u>RQ/TPQ Lbs</u> |
|-----------------|----------------|------------|-------------------|
| NONE            |                |            |                   |

This product contains the following (CERCLA LIST) HAZARDOUS SUBSTANCE(S) subject to Emergency Release Notification Requirements under Sec. 304 (40 CFR Part 302):

| <u>Chemical</u> | <u>CAS No.</u> | <u>Wt%</u> | <u>Final RQ Lbs</u> |
|-----------------|----------------|------------|---------------------|
| NONE            |                |            |                     |

**CALIFORNIA PROPOSITION 65:**

This product may contain trace quantities of the following chemicals that are identified by the State of California under the Safe Drinking Water and Toxic Reinforcement Act of 1986 ("Proposition 65") as either a carcinogenic or reproductive hazard:

| <u>Chemical</u> | <u>CAS No.</u> | <u>Estimated Concentration %</u> |
|-----------------|----------------|----------------------------------|
| NONE            |                |                                  |

---

Although the information contained herein is believed to be reliable, it is furnished without warranty of any kind. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, and storage.

# MATERIAL SAFETY DATA SHEET

## DAUBERT CHEMICAL COMPANY

4700 SOUTH CENTRAL AVENUE  
CHICAGO, ILLINOIS 60638  
TELEPHONE: (708) 496-7350  
FAX: (708) 496-7367  
EMERGENCY CONTACT:  
CHEMTREC (800) 424-9300

## HMIS HAZARD RATING

|                     |   |
|---------------------|---|
| Health              | 1 |
| Fire                | 1 |
| Reactivity          | 0 |
| Personal Protection | X |

Date of Review: December 17, 2009  
Date of Preparation: November 27, 2006

Revised:  
By: Doug Howell

## SECTION 1: PRODUCT IDENTIFICATION

Product Name: **DAUBOND® CLEANER**  
Chemical Family: Benzoate ester (Aromatic)  
Product Use: Plasticizer for hot melt adhesives, powder coatings and binding agents.

## SECTION 2: HAZARDOUS INGREDIENTS

| Component  | Wt%      | Recommended Exposure Limits (TWA) |
|--|----------|-----------------------------------|
| 1,4-cyclohexanedimethanol, dibenzoate<br>CAS #35541-81-2 | 98.0-100 | None Established                  |

## SECTION 3: HEALTH HAZARD INFORMATION

**Emergency Overview:** White or Off-white. Crystalline solid. Slight odor.  
HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES.

**Potential Health Effects:** Skin contact is expected to be the major route of occupational exposure. Due to particle size (0.3% <0.5 mm), Daubond® Cleaner is not expected to be an inhalation hazard. No significant adverse effects are expected when good industrial hygiene and safety practices are followed.

Daubond® Cleaner is considered, on the basis of single exposure animal tests, to be practically non-toxic after swallowing, no more than slightly toxic after skin contact, practically non-irritating to eyes and non-irritating to skin.

## SECTION 4: FIRST AID PROCEDURES

**Eye Contact:** Flush with plenty of water. Seek medical attention if irritation persists.

**Skin Contact:** Flush the area with plenty of water, Remove material from clothing. Wash clothing before reuse.

**Inhalation:** Remove to fresh air.

**Ingestion:** If swallowed, induce vomiting as directed by medical personnel. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

## SECTION 5: FIRE AND EXPLOSION HAZARD DATA

**Flammability of the Product:** Combustible

**Auto-Ignition Temperature:** >450 °C (>842 °F)

**Flash Points:** OPEN CUP: 258 °C (496.4 °F)

**Flammable limits:** Not available.

**Fire and Explosion Hazards:** Products of combustion are carbon oxides (CO, CO<sub>2</sub>)

**Fire Fighting Media and Instructions:** SMALL FIRE: Use dry chemicals, CO<sub>2</sub>, water spray or foam. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

May be an environmental hazard. Contain runoff from fire.

Firefighters and others who may be exposed to products of combustion should wear full firefighting turnout gear and self-contained breathing apparatus. Firefighting equipment should be thoroughly decontaminated after use.

## SECTION 6: SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

**Small Spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container.

**Large Spill:** Stop the leak, if possible, Remove all ignition sources. Ventilate the area involved. Sweep up material and place in container for later disposal.

## SECTION 7: SAFE HANDLING INFORMATION

**Handling:** Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin, and clothing. Keep away from sources of ignition.

**Storage:** Store in well ventilated area away from sources of ignition.

## SECTION 8: EXPOSURE CONTROLS

**Engineering Controls:** Investigate engineering controls to reduce exposures. Provide ventilation if necessary to minimize exposure. If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Gloves.

**Personal Protection in case of a large spill:** Splash goggles. Full suit. Boots, Gloves. Dust respirator. Suggested protective clothing might not be sufficient: consult as specialist BEFORE handling this product.

## SECTION 9: REACTIVITY HAZARD DATA

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of instability:** No additional remark.

**Incompatibility with various substances:** No specific information is available in our database regarding the reactivity of this material in presence of various other materials.

**Corrosivity:** No specific information is available in our database regarding the corrosivity of this material in presence of various materials.

**Hazardous Polymerization:** Will not occur.

**Hazardous Decomposition Products:** Not available.

## SECTION 10: PHYSICAL AND CHEMICAL PROPERTIES

|                              |   |
|------------------------------|---|
| Physical State / Appearance: | Crystalline solid   |
| Color:                       | White or Off-white  |
| Odor:                        | Slight odor   |
| Boiling Point:               | Not available   |
| Melting Point:               | 116.5 °C (241.7 °F)   |
| Critical Temperature:        | Not available   |
| Specific Gravity:            | 1.23 Water = 1  |
| Vapor Pressure:              | 2.2 x 10 <sup>-5</sup> mm of Hg (@ 20 °C)                                     |
| Vapor Density:               | Greater than air  |
| Volatility:                  | Not available   |
| Odor Threshold:              | Not available   |
| Evaporation Rate:            | <1 (Butyl acetate)  |
| Viscosity:                   | Not available   |
| Solubility:                  | Insoluble in cold water, hot water<br>Water solubility <0.0000208 g/l @ 20 °C |
| pH (1% soln/water):          | Not applicable  |
| Molecular Weight:            | 352/mole  |

## SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity to Animals Data from toxicity studies are summarized below:

Acute oral toxicity (LD50): >5000 mg/kg (Rat), practically non-toxic.

Acute dermal toxicity (LD50): >2000 mg/kg (Rabbit), No More Than Slightly Toxic.

Eye Irritation: Rabbit: 1.11/110.0, practically non-irritating.

Skin Irritation: Rabbit: 0.0/8.0, Non-irritating

No allergic skin reaction was reported in guinea pigs after repeated skin contact. No effects were observed in rats given up to 1000 mg/kg/day for 28 days. No genetic changes were reported in standard tests using bacteria and human cells.

Daubond<sup>®</sup> Cleaner was investigated in a dietary study to assess the effects on the reproductive performance CD rats treated continuously through two generations. There were no obvious effects of treatment on the general condition, fertility, reproductive performance, seminology, detailed macropathology or selected histopathological parameters in either generation of adults. Survival and development of both generations of offspring were similarly unaffected by treatments. The study indicated that a dietary concentration of Daubond<sup>®</sup> Cleaner at 10,000 ppm could be considered the NOEL for both adults and offspring in both generations.

## SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicology: Rainbow Trout - 96 hour LC50: > 0.8 mg/l = 100 mg/l as Water accommodated Fraction (WAF); Daphnia -48 hour LC50: >0.0014 mg/l — 100 mg/l as WAF; Algal growth inhibition 72 hours EC50: > 0.012 mg/l (Maximum test concentration due to low water solubility).

Chemical Fate : Log Pow >3.73 @ 20 °C.

Water solubility <0.0000208 g/l @ 20 °C; Activated Sewage Sludge Respiration Inhibition Test 3hr EC50 > 100 mg/l; Ready Biodegradability (Closed Bottle) Test = 28% biodegradation within 28 days, not readily biodegradable.

**SECTION 13: DISPOSAL INFORMATION**

**Waste Disposal:** Recycle to process, if possible. Consult your local or regional authorities for disposal options. Industrial landfill or incinerations are appropriate disposal methods. Not a listed or characteristic hazardous waste in the U.S.A.

**SECTION 14: TRANSPORT INFORMATION**

|                           |   |
|---------------------------|---|
| DOT Proper Shipping Name: | Not applicable.                             |
| DOT Hazard Class:         | Not a DOT controlled material United States |
| UN Identification Number: | Not applicable.                             |
| Packing Group:            | Not applicable.                             |

---

Although the information contained herein is believed to be reliable, it is furnished without warranty of any kind. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, and storage.

# MATERIAL SAFETY DATA SHEET

## DAUBERT CHEMICAL COMPANY

4700 SOUTH CENTRAL AVENUE  
CHICAGO, ILLINOIS 60638  
TELEPHONE: (708) 496-7350  
FAX: (708) 496-7367  
EMERGENCY CONTACT:  
CHEMTREC (800) 424-9300

## HMIS HAZARD RATING

|                     |   |
|---------------------|---|
| Health              | 1 |
| Fire                | 1 |
| Reactivity          | 0 |
| Personal Protection | X |

Date of Review: February 3, 2010

Revised: February 3, 2010

Date of Preparation: January 19, 2007

By: M. Hogan

## SECTION 1: PRODUCT IDENTIFICATION

Product Name: **DAUBOND® PUR REMOVER**  
Product Use: Cleaning Agent / REMOVER

## SECTION 2: HAZARDOUS INGREDIENTS

| Component                              | Wt% | Recommended Exposure Limits (TWA)      |
|--|-----|--|
| Polyethylene glycol<br>CAS #25322-68-3 | >99 | 10 mg/m <sup>3</sup> (TWA particulate) |

## SECTION 3: HEALTH HAZARD INFORMATION

**Inhalation:** At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous.

**Eye Contact:** May cause slight temporary eye irritation. Corneal injury is unlikely.

**Skin Contact:** Prolonged contact may cause slight skin irritation with local redness.

**Skin Absorption:** Prolonged skin contact is unlikely to result in absorption of harmful amounts. Prolonged/repeated exposure to damaged skin (as in burn patients) may result in absorption of toxic amounts.

**Swallowing:** Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

**Other Effects of Chronic, Prolonged or Repeated Overexposure:** Recent findings of kidney failure and death in burn patients, as well as some studies using animal burn models, suggest that polyethylene glycol may have been a factor. The use of topical applications containing this material may not be appropriate in severely burned **patients or individuals with impaired renal function.**

## SECTION 4: FIRST AID PROCEDURES

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:** Immediately wash with water and soap and rinse thoroughly. Generally the product does not irritate the skin.

**After eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**After swallowing:** Rinse out mouth with plenty of water. Immediately call a doctor.

**Notes to Physician:** Absorption may be promoted by damaged skin. J Pharm Sci. 1985 Oct;74(10):1062-6; Burns Incl Therm Inj 1982 Sep;9(1):49-52. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## SECTION 5: FIRE AND EXPLOSION HAZARD DATA

**Extinguishing Media** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

**Fire Fighting Procedures** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from a protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

**Special Protective Equipment for Firefighters** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

**Unusual Fire and Explosion Hazards** 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.

**Hazardous Combustion Products** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide, Carbon dioxide.

## SECTION 6: SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

**Measures for environmental protection:** Do not allow to enter sewers/surface or ground water.

**Measures for cleaning/collecting:** Absorb with liquid-binding material (sand, diatomite, sawdust).

**Other Precautions:** Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

## SECTION 7: SAFE HANDLING INFORMATION

**Ventilation:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

**Storage:** Store in the following material(s): stainless steel, polypropylene, polyethylene lined container, Teflon, glass-lined container, Plasite 3066 lined container, Plasite 3070 lined container, 316 stainless steel.

## SECTION 8: EXPOSURE CONTROLS

**Eye protection:** Goggles recommended during refilling.

**Respiratory Protection:** Atmospheric levels should be maintained below the exposure guideline.

When airborne exposure guidelines and/or comfort levels may be exceeded, for example, if sprayed or heated, use an approved air-purifying respirator, e.g., organic vapor cartridge with a particulate pre-filter.

**Ventilation:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

**Eye Protection:** Use safety glasses.

**Other Protective Equipment:** Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

|                              |  |
|------------------------------|--|
| Form:                        | Fluid  |
| Color:                       | Colorless                                      |
| Odor:                        | Mild   |
| Melting point/Melting range: | 7.7 °C (18 °F)                                 |
| Boiling point/Boiling range: | >200°C (>392 °F)                               |
| Flash Point:                 | >217 °C (424 °F)                               |
| Danger of explosion:         | Product does not present any explosion hazard. |
| Density at 20 °C (68 °F):    | 1.127  |
| Solubility in Water          | Miscible                                       |
| Vapor Density (air = 1)      | 10 (calculated)                                |
| Vapor Pressure at 20°C       | <.01 mmHg                                      |

## SECTION 10: STABILITY AND REACTIVITY

**Thermal decomposition:** No decomposition if used according to specifications.

**Dangerous reactions:** No dangerous reactions known.

**Conditions to Avoid:** Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems.

**Incompatible Materials:** Avoid contact with: Strong acids, strong bases, strong oxidizers.

**Thermal Decomposition:** Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Aldehydes. Alcohols. Ethers. Carbon dioxide. Carboxylic acids. Polymer fragments.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Ingestion:** LD50, Rat 29,000 - 39,000 mg/kg

**Skin Absorption:** LD50, Rabbit > 20,000 mg/kg

**Inhalation:** Maximum attainable concentration. LC50, 8 h, Vapor, Rat > 13 ppm

**Sensitization, Skin:** Did not cause allergic skin reactions when tested in humans.

**Repeated Dose Toxicity:** Recent findings of kidney failure and death in burn patients, as well as some studies using animal burn models, suggest that polyethylene glycol may have been a factor. The use of topical applications containing this material may not be appropriate in severely burned patients or individuals with impaired renal function. Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

**Chronic Toxicity and Carcinogenicity:** Similar material(s) did not cause cancer in laboratory animals.

**Developmental Toxicity:** For similar material(s): Did not cause birth defects in laboratory animals.

**Reproductive Toxicity:** For similar material(s): In animal studies, did not interfere with reproduction.

**Genetic Toxicology:** In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

## SECTION 12: ECOLOGICAL INFORMATION

### Movement & Partitioning

No bioconcentration is expected because of the relatively high water solubility.

### Persistence and Degradability

Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%).

### Biological oxygen demand (BOD):

BOD 5: 3 %

BOD 10: 28 %

BOD 20: 64 %

**Chemical Oxygen Demand:** 1.76 mg/mg

**Theoretical Oxygen Demand:** 1.71 mg/mg

### ECOTOXICITY

Material is practically non-toxic to aquatic invertebrates on an acute basis (LC50/EC50 > 100 mg/L).

### Fish Acute & Prolonged Toxicity

LC50, fathead minnow (Pimephales promelas), 96 h: > 73,000 mg/l

### Aquatic Invertebrate Acute Toxicity

LC50, water flea Daphnia magna: > 10,000 mg/l

## SECTION 13: DISPOSAL INFORMATION

All disposal practices 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.

**SECTION 14: TRANSPORT INFORMATION**

**DOT Non-Bulk**  
NOT REGULATED  
**DOT Bulk**  
NOT REGULATED  
**IMDG**  
NOT REGULATED  
**ICAO/IATA**  
NOT REGULATED

**SECTION 15: REGULATORY INFORMATION**

Delayed (Chronic) Health Hazard : No  
Fire Hazard : No  
Immediate (Acute) Health Hazard : No  
Reactive Hazard : No  
Sudden Release of Pressure Hazard : No

Volatile Organic Content:  
VOC per Liter (EPA Method 24): 2 g/l

**SARA TITLE III:**

This product contains the following TOXIC CHEMICALS subject to the Reporting Requirements of Sec. 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and of 40 CFR Part 372:

| Chemical | CAS No. | Wt% |
|----------|---------|-----|
| NONE     |         |     |

This product contains the following EXTREMELY HAZARDOUS SUBSTANCE(S) subject to Emergency Planning Requirements under Sec. 301-303 (40 CFR Parts 300 and 355) and Emergency Release Notification Requirements under Sec. 304:

| Chemical | CAS No. | Wt% | RQ/TPQ Lbs |
|----------|---------|-----|------------|
| NONE     |         |     |            |

This product contains the following (CERCLA LIST) HAZARDOUS SUBSTANCE(S) subject to Emergency Release Notification Requirements under Sec. 304 (40 CFR Part 302):

| Chemical | CAS No. | Wt% | Final RQ Lbs |
|----------|---------|-----|--------------|
| NONE     |         |     |              |

**CALIFORNIA PROPOSITION 65:**

This product may contain trace quantities of the following chemicals identified by the State of California under the Safe Drinking Water and Toxic Reinforcement Act of 1986 ("Proposition 65") as either a carcinogenic or reproductive hazard:  
NONE

**SECTION 16: OTHER INFORMATION**

Although the information contained herein is believed to be reliable, it is furnished without warranty of any kind. This information is not intended to be all-inclusive as to the manner and conditions of use, handling, and storage.

# MATERIAL SAFETY DATA SHEET

## DAUBERT CHEMICAL COMPANY

4700 SOUTH CENTRAL AVENUE  
CHICAGO, ILLINOIS 60638  
TELEPHONE: (708) 496-7350  
FAX: (708) 496-7357

EMERGENCY CONTACT:  
CHEMTREC: (800) 424-9300

## HMIS HAZARD RATING

|                     |   |
|---------------------|---|
| HEALTH              | 0 |
| FIRE                | 1 |
| REACTIVITY          | 0 |
| PERSONAL PROTECTION |   |

Date of Review: N/A  
Date of Preparation: July 25, 2006

Revised: N/A  
By: D. Howell

## SECTION I: PRODUCT IDENTIFICATION

Product Name: **Daubond<sup>®</sup> Grease**  
Chemical Family: Modified oil soluble calcium sulfonate, over based  
Material Usage: Rust preventative

## SECTION II: COMPOSITION

| Component                                  | CAS #         |
|--|---------------|
| One or More Oil Soluble Calcium Sulfonates | Trade Secrets |
| Petrolatum                                 | 8009-03-8     |
| Calcium Carbonate                          | 471-34-1      |
| One or More of the Following               | 64741-88-4    |
| Mineral Oils,                              | 64741-96-4    |
| (Severally treated):                       | 64742-52-5    |
|  | 64742-54-7    |

## SECTION III: HAZARDS INFORMATION

**Hazardous Ingredients:** None  
**EU Risk phrases:**  
Symbols: None  
R phrases: None  
**Canadian WHIMS:** Not a "Hazardous Product" under WHIMS classifications.

## SECTION IV: FIRST AID MEASURES

### **Immediate treatment:**

**Eye contact:** May cause eye irritation. Flush with large amounts of water for at least 15 minutes. Call a physician.

**Skin contact:** Wash skin thoroughly with soap and water after handling. Prolonged or repeated contact may cause dermatitis (skin irritation). If hot material contacts skin, immediately cool before attempting removal. Cool with water or ice. Apply topical dressing. Severe blistered burns should be treated by a physician.

**Inhalation:** Remove to fresh air. If breathing is difficult, give oxygen and call a physician.

**Ingestion:** No data available. Contact a physician.

### **NOTE TO PHYSICIANS**

**Routes of entry:** Eyes, skin, ingestion, inhalation of mist.

**Target organs:** Eyes, skin, respiratory system.

## SECTION V: FIRE AND EXPLOSION HAZARD DATA

**Special hazards or procedures:** This product poses no unusual fire fighting problems. It will burn if involved in a fire. Oxides of sulfur

(SO<sub>2</sub>) will be given off while burning. Water spray is not a suitable extinguishing agent, it may cause fire to spread. See extinguishing media.

**Protective equipment:** As in any fire, firefighters must be equipped to prevent breathing of vapors or products of combustion.

Wear an approved self-contained breathing apparatus and protective clothing.

**Extinguishing media:** Dry chemical, water fog, CO<sub>2</sub>, foam, or sand/earth. Closed containers may be cooled with water.

## SECTION VI: ACCIDENTAL RELEASE MEASURES

**Procedures for spill clean-up:** Shut off leak and dike up large spills. Absorb with an inert material such as sand, soil or vermiculite Sweep up absorbent and dispose according to regulatory requirements.

## SECTION VII: HANDLING AND STORAGE

**Handling:** Keep drums tightly closed to prevent contamination. Avoid skin and eye contact. Wear recommended personal protection equipment. Discard or wash contaminated clothing before reuse.

**ATTENTION:** Never use pressure to empty drums.

**Storage:** Maximum storage temperature: 93 °C.

## SECTION VIII: EXPOSURE CONTROL/PERSONAL PROTECTION

**Ventilation required:** None normally required. Use additional ventilation if needed to control vapor concentrations particularly if a mist is generated or fumes from hot material are present.

**Respiratory protection:** None required if area adequately ventilated. Use appropriate respiratory protection if used in confined areas. If used in an application where a mist may be generated, observe a TWA/PEL of 5 mg/m<sup>3</sup> (OSHA, ACGIH) for a mineral oil mist. Use a respirator with dual organic vapor/mist and particulates cartridge if *vapor* concentration exceeds permissible exposure limit.

**Skin reaction:** Use neoprene type gloves and apron.

**Eye protection:** Wear chemical safety goggles and/or a face shield. Contact lenses should not be worn.

## SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

|  |                                 |
|--|---------------------------------|
| Physical state at 25 °C:                 | Viscous liquid                  |
| Color:                                   | Brown                           |
| Odor:                                    | Mild petroleum                  |
| Changes in physical state at 1 bar:      | No data available/none expected |
| Density at 16 °C (gm/cm <sup>3</sup> ):  | > 1                             |
| Vapor pressure at 20 °C (mm Hg):         | <0.0003                         |
| Vapor density (air=1):                   | Not applicable                  |
| Viscosity at 40 °C (SUS):                | >100                            |
| Solubility in H <sub>2</sub> O at 25 °C: | negligible                      |
| pH( 1%):                                 | No data available               |
| Flash point (ASTM D-92):                 | > 180 °C                        |
| Autoignition temperature:                | No data available               |
| Flammability limits in air:              | No data available               |
| Volatile (by weight%):                   | <4%                             |

## SECTION X: STABILITY AND REACTIVITY

This product is stable and not subject to hazardous polymerization.

**Hazardous decomposition products:** Oxides of carbon (carbon monoxide carbon dioxide), oxides of hydrogen (water), oxides of sulfur (sulfur dioxide), and oxides of calcium are all formed from burning.

**Incompatible materials:** Strong oxidizers such as hydrogen peroxide, oxidizing chlorine and bromine compounds (e.g. chlorine bleach) and chromic acid.

**Conditions to avoid:** Oxidizing agents; skin and eye contact.

## SECTION XI: TOXICOLOGICAL INFORMATION

**Acute toxicity:** May cause eye and skin irritation. The handling procedures and safety precautions in this MSDS should be followed to minimize employee exposure.

**Chronic toxicity:** No data available.

## SECTION XII: ECOLOGICAL INFORMATION

No data available.

## SECTION XIII: DISPOSAL CONSIDERATIONS

Not a hazardous waste if disposed of as is, by the definitions of the U.S. EPA. Dispose of properly complying with appropriate laws and regulations.

## SECTION XIV: TRANSPORTATION INFORMATION

**US DOT and Canadian 71130:**

Not regulated for transport unless shipped hot, at temperatures greater than 100 °C (212°F) but below the flash point and in containers of 450 liters (119 gal US) or more. For these conditions:

**Proper shipping Name:** Elevated Temperature, Liquid, 65 Petroleum Oil, n.o.i.b.n., (at or above 100°C (212°F) and below its flash point).

**Hazard Class:** 9

**ID Number:** UN3257

## SECTION XV: REGULATORY INFORMATION

### EU labeling:

Symbols: none

R phrases: none

S phrases: 36/37/39 'wear suitable clothing protective /wear suitable gloves/wear eye/face protection'

24/25 'avoid contact with skin' avoid contact with eyes'

26 'in case contact of with eyes rinse with plenty of water and seek medical advice'

28 (soap and water) 'after contact with skin, wash immediately with plenty of "soap and water"'

**Canadian WHIMS:** Not a "Hazardous Product" under W71-IIMS classifications.

**Chemical Inventory Information:** All the components of this product are listed in the following chemical inventories: TSCA (United States) ETNECS (European Union). ENCS (Japan), AICS (Australia), DSL (Canada).

## SECTION XVI: OTHER INFORMATION

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use. The information shall not be regarded as legally binding assurance of certain properties or suitability for a particular application.

**Comments:** This product has not been tested in long term, chronic exposure, therefore, the handling procedures and safety precautions in the MSDS should be followed to minimize employee exposure.

### **Label Information for the United States:**

**CAUTION:** May cause skin and eye irritation. Do not swallow. Avoid eye and skin contact. Wash thoroughly after handling. Avoid contact with clothing. Wash clothing before reuse. Keep out of reach of children. Keep containers tightly closed when not in use. Avoid breathing mists or sprays of this product or its solutions.

### **EMERGENCY FIRST AID PROCEDURES**

Eye contact: Flush with large amounts of water for at least 15 minutes. Call a physician.

Skin contact: Wash skin thoroughly with soap and water after handling. If hot material contacts skin, immediately cool before attempting removal. Cool with water or ice. Apply topical dressing. Severe blistered burns should be treated by a physician.

Inhalation: Remove to fresh air. If breathing is difficult, give oxygen and call a physician.

Ingestion: Call a physician. Induce vomiting if victim is conscious. Never give anything by mouth to an unconscious person.

FOR INDUSTRIAL USE ONLY. SEE SAFETY DATA SHEET FOR DETAILED INFORMATION.

**ATTENTION:** Never use pressure to empty container, a drum is not a pressure vessel. When empty, drum may have vapor or product residue. Residual vapors may explode on ignition; do not puncture, drill, grind, or weld on or near this container.

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use. The information shall not be regarded as legally binding assurance of certain properties or suitability for a particular application.