# HALL CHEM MFG. INC.

1270 rue Nobel Boucherville Qc J4B 5H1

#### Tel.: (450) 645-0296 Fax: (450) 645-0444

# MATERIAL SAFET Y DATA SHEET

# **EMERGENCY : CANUTEC (613) 996-6666**

# **MSDS: 292-2**

# **PRODUCT IDENTIFICATION AND USE**

NAME OF PRODUCT : Antifreeze Super Diesel long life heavy duty USE OF PRODUCT : Antifreeze for diesel motor

# TRANSPORTATION OF DANGEROUS GOODS

SHIPPING NAME : P.N.I. : PACKING GROUP : WHMIS CLASSIFICATION: D2A, D2B PRIMARY CLASS : no regulated SUBSIDIARY CLASS :

# **COMPONENTS**

| COMPOSITION       | % V/V     | CASE #   | LD <sub>50</sub> mg/<br>kg<br>Oral/rat | LC <sub>50</sub> | TLV ppm 8h   |
|-------------------|-----------|----------|--|------------------|--------------|
| Ethylene glycol   | 91,8-92,6 | 107-21-1 | 4700                                   |                  | 100000 mg/m3 |
| Diethylene glycol | 0,042     | 111-46-6 | 12565                                  |                  |              |
| Rust Inhibitors   |           |          |  |                  |              |

# PHYSICAL CHARACTERISTICS

| <b>PHYSICAL STATE :</b>      | APPEARANCE :                        | ODOR :                               | <b>ODORTRESHOLD :</b> |
|------------------------------|-------------------------------------|--------------------------------------|-----------------------|
| Liquid                       | Pink                                | Typical                              | Not available         |
| VAPOR TENSION (20°C):        | VAPOR DENSITY (air=1) :             | EVAPORATING RATE (butyl acétate =1): |                       |
| 0,06 mm Hg                   | 2,2                                 | 0,01                                 | -                     |
| <b>BOILING RANGE :</b> 145°C | <b>FREEZING POINT :</b> -37°C (50%) | <b>pH :</b> 10,0 - 11,0              |                       |
| to 147°C (293,5°F -296°F)    |                                     | -                                    |                       |
| DENSITY (20°C) :             | DISTRIBUTION FACTOR                 | SOLUBILITY IN WA                     | <b>TER</b> (25°C) :   |
| 1,12                         | WATER/OIL : Not available           | 100%                                 |                       |

# **REACTIVITY DATA**

CHEMICAL STABILITY : Stable under normal storage conditions



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**INCOMPATIBILITY WITH OTHER PRODUCTS :** Avoid oxidizers, and reducing agents, acids, and organic material

**REACTIVITY CONDITIONS :** No hazardous polymerization.

### **EXPLOSION AND FIRE RISKS**

FLAMMABILITY :

**EXTINGUISHING METHODS :** Alcohol foam, carbon dioxide, dry chemical.

FLASH POINT: 116,1°C, Tag, closed cup

1

AUTO-IGNITION TEMPS. : 400°C

115,6, Cleveland, open cup

FLAMMABILITY (% per volume)

**SUPERIOR LIMIT :** 15,3

**LOWER LIMIT :** 3,2

HAZARDOUS COMBUSTION PRODUCT : Burning may produce carbon dioxide and carbon monoxide and oxides of nitrogen.

EXPLOSIBILITY DATA : Do not use link close to product.

# **TOXICOLOGICAL PROPERTIES**

| ABSORPTION WAYS : |               |              | CONTACT :    |         |  |
|-------------------|---------------|--------------|--------------|---------|--|
| SKIN $$           | INHALATION $$ | INGESTION $$ | WITH SKIN $$ | EYES $$ |  |

**EFFECTS OF EXPOSURE TO PRODUCT :** Product can irritate mucus glands. High doses can provoke headaches, drowsiness, nausea, dizziness and fainting. Inhalation may aggravate cases of emphysema and bronchitis. Repeated contact with skin provokes irritations, dryness and cracking of the skin.

### **PREVENTIVE MEASURES**

**PROTECTIVE EQUIPMENT :** General ventilation, gloves, security glasses and protective apron.

GLOVES : PVC, nitrile, rubber.

**RESPIRATORY SYSTEM :** Necessary only if limit of exposure is exceeded.

OCULAR INSTRUMENT : Chemical splash goggles CLOTHING : Protective apron

TECHNICAL CONTROL : Ventilation

**PROCEDURE IN CASE OF LEAKS/SPILLS :** Wear suitable protective equipment. Large spills should be contained and collected. Small spills can be collected or may be absorbed with appropriate liquid absorbing materials. All spill responses and disposal should be carried out in accordance with federal, provincial, and local regulations. Put the waste in a closed container until future disposal.

**HANDLING :** Handle and open the containers with precaution. Do not weld or cut containers because they can contain residues from flammable vapors. Do not heat or pressurize containers. Do not put any non-combustible material in empty containers, violent chemical reactions can occur. Do not eat or drink on working areas. Respect a good personal hygiene after manipulation of the product. Keep containers electrically grounded specially during manipulation or while transferring. The material can accumulate static.



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**WASTE DISPOSAL**: Do not dispose in sewers nor in regular trashes.

**STORAGE :** In a cool, dry and well ventilated area. Keep away from incompatible material and from sources of ignition (naked flames, sparks, electricity). Keep the containers grounded especially during pumping and transfer operations.

# FIRST AID

- **SKIN :** Remove contaminated clothing. Wash exposed area with soap and water. If symptoms persist, seek medical attention.
- **EYES :** Flush gently water yours eyes while holding eyelids apart; seek immediate medical attention.
- **INHALATION :** If symptoms develop, immediately move individual away from exposure and into fresh air. Seek immediate medical attention; keep person warm and quiet. If person is not breathing, begin artificial respiration. If breathing is difficult, administer oxygen. Contact a physician.
- **INGESTION :** Do not induce vomiting. If spontaneous vomiting occurs, avoid the victim from inhaling its vomit. Keep victim at rest and warm. Call for medical assistance immediately and/or bring the victim to the hospital or the nearest poison center.
- **NOTE TO PHYSICIAN :** This product contains ethylene glycol. Ethanol decreases the metabolism of ethylene glycol to toxic metabolites. Ethanol should be administered as soon as possible in cases of severe poisoning since the elimination half-life of ethylene glycol is 3 hours. If medical care will be delayed several hours, use three to four 1-ounce oral "shots" of 86-proof whiskey before or during transport to the hospital.

# **INFORMATION ON THE M.S.D.S. PREPARATION**

PREPARED BY : Hall Chem Mfg. Inc. TELEPHONE :(514) 645-0296

DATE January, 2015

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