HALL CHEM MFG. INC.
1270 rue Nobel (450)645-0296
Boucherville, Quebec (450)645-0444
J4B 5H1

MATERIAL SAFETY DATA SHEET

EMERGENCY : CANUTEC (613) 996-6666

MSDS: 110-2

PRODUCT IDENTIFICATION AND USE

NAME OF PRODUCT : Antifreeze Super diesel

USE OF PRODUCT: Antifreeze for diesel motor

TRANSPORTATION OF DANGEROUS GOODS

SHIPPING NAME:

WHMIS CLASSIFICATION: D2A, D2B

P.N.I. :

PRIMARY CLASS : not regulated

PACKING GROUP :

SUBSIDIARY CLASS :

COMPONENTS

COMPOSITION	% V/V	CASE #	LD_{50}mg/kg Oral/rat	LC_{50}	TLV ppm 8h
Ethylene glycol	90 to 95	107-21-1	4700		100 000mg/m³
Diethylene glycol	0 to 5	111-46-6	12565		
Corrosion Inhibitors					

PHYSICAL CARACTERISTICS

PHYSICAL STATE : Liquid	**APPEARANCE :** Viscous, green-blue color	**ODOR :** Typical	**ODORTRESHOLD :** Not available
VAPOR TENSION (20°C) : 0,06 mm Hg	**VAPOR DENSITY (air = 1) :** 2,2	**EVAPORATING RATE (butyl acetate = 1) :** 0,01	
BOILING RANGE : 140°C to 158°C (285°F-317°F)	**FREEZING POINT :** -37°C (50/50)	**pH :** 9.5-11	
DENSITY (20°C) : 1,12	**DISTRIBUTION FACTOR WATER/OIL :** Not available	**SOLUBILITY IN WATER (25°C) :** 100%	

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REACTIVITY DATA

CHEMICAL STABILITY: Stable

INCOMPATIBILITY WITH OTHER PRODUCTS : Avoid oxidizers.

REACTIVITY CONDITIONS : No hazardous polymerization

EXPLOSION AND FIRE RISKS

FLAMMABILITY : 1

EXTINGUISHING METHODS : Apply alcohol type or all purpose type foams by manufacturers recommended techniques for large fires. Use water spray, carbon dioxide or dry chemical media for small fires.

FLASH POINT : 116,1°C, Tag closed cup
115,6°C, Cleveland open cup

AUTO-IGNITION TEMPS. : 400°C

FLAMMABILITY (% per volume)
SUPERIOR LIMIT : 15,3 **LOWER LIMIT :**3,2

HAZARDOUS COMBUSTION PRODUCT : Burning may produce carbon oxide, carbon dioxide and water. Burning may also produce others organic compounds that can not be identified.

EXPLOSIBILITY DATA :

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 of the skin and cracking of the skin.

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PREVENTIVE MEASURES

PROTECTIVE EQUIPMENT : Gloves, security glasses and protective apron.

GLOVES :

RESPIRATORY SYSTEM :

OCULAR INSTRUMENT :

CLOTHING :

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 response and disposal should be carried out in accordance with federal, provincial, and local regulations. Put the waste in a closed container until future disposal. Do not throw in the sewers or garbage.

HANDLING : Handle and open the containers with precaution. Do not weld or cut the 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 smoke, 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.

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 : **TELEPHONE : (450) 645-0296** **REVISED – January, 2007**
Hall Chem Mfg. Inc.

NOTE :
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