## VALVOLINE COMPANY -- ZEREX ANTIFREEZE COOLANT -- -

Product ID:ZEREX ANTIFREEZE COOLANT MSDS Date:11/20/1996 FSC:NIIN:Submitter:F BT Status Code:A MSDS Number: CKDGG === Responsible Party === Company Name: VALVOLINE COMPANY Box:14000 City:LEXINGTON State:KY ZIP:40512 Country:US Info Phone Num:608-357-7000; 274-5263 Emergency Phone Num: 606-357-7847 CAGE: JO366 === Contractor Identification === Company Name: VALVOLINE COMPANY Box:14000 City:LEXINGTON State:KY ZIP:40512 Country:US Phone:859-357-7206; EMERGENCY:800-274-5263 CAGE: JO366 ======= Composition/Information on Ingredients ========== Ingred Name: ETHYLENE GLYCOL CAS:107-21-1 RTECS #:KW2975000 = Wt:90. ACGIH STEL:C127 MG/M3;C50 PPM EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB Ingred Name:DIETHYLENE GLYCOL CAS:111-46-6 RTECS #:ID5950000 Minumum % Wt:1. Maxumum % Wt:10. Ingred Name: DIPOTASSIUM PHOSPHATE CAS:7758-11-4 Minumum % Wt:1. Maxumum % Wt:7. Routes of Entry: Inhalation:YES Skin:UNKNOWN Ingestion:YES Health Hazards Acute and Chronic: EYES/SKIN: MILD IRRITATION. INGESTION: MAY CAUSE HARMFUL EFFECTS. INHALATION: IRRITATION TO NOSE, THROAT & AIRWAYS. CNS DEPRESSION. MAY CAUSE KIDNEY DAMAGE. Effects of Overexposure: IRRITATION, STINGING, TEARING, REDNESS,

BURNING, INTESTINAL UPSET, NAUSEA, VOMITING, DIARRHEA, DIZZINESS, DROWSINESS, WEAKNESS, FATIGUE, HEADACHE, UNCONSCIOUSNESS Medical Cond Aggravated by Exposure:PREEXISTING DISORDERS OF CNS EFFECTS, LIVER ABNORMALITIES, KIDNEY DAMAGE.

First Aid:EYES: IMMEDIATELY MOVE INTO FRESH AIR. FLUSH GENTLY W/WATER FOR 15MINS. SKIN: WASH W/SOAP & WATER. INHALATION: MOVE AWAY FROM EXPOSURE & INTO FRESH AIR. KEEP WARM & QUIET. BEGIN ARTIFICIAL RESPIRATION . IF BREATHING IS DIFFICULT, ADMINISTER OXYGEN. OBTAIN MEDICAL ATTENTION IN ALL CASES. NOTE TO PHYSICIANS: PRODUCT CONTAINS ETHYLENE GLYCOL. ETHANOL SHOULD BE ADMINISTERED AS SOON AS POSSIBLE IN CASES OF SEVERE POISONING SINCE THE ELIMINATION HALF-LIFE OF ETHYLENE GLYCOL IS 3 HOURS. GIVE THE PATIENT 3-4 ONE OUNCE ORAL SHOTS OF 86 PROOF/HIGHER WHISKEY BEFORE/DURING TRANSPORT TO HOSPITAL.

Flash Point:=121.1C, 250.F

Lower Limits:3.2

Upper Limits:15.3

Extinguishing Media: ALCOHOL FOAM, CO2, DRY CHEMICAL

- Fire Fighting Procedures:WEAR A SELF CONTAINED BREATHING APPARATUS W/A FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE DEMAND MODE W/APPROPRIATE TURN-OUT GEAR & CHEMICAL RESISTANT PERSONAL PROTECTIVE EQUIPMENT.
- Unusual Fire/Explosion Hazard:NEVER USE WELDING/CUTTING TORCH ON/NEAR DRUM EVEN EMPTY BECAUSE PRODUCT EVEN JUST RESIDUE CAN IGNITE EMPLOSIVELY.

Spill Release Procedures:ABSORB LIQUID ON VERMICULITE, FLOOR ABSORBENT/OTHER ABSORBENT MATERIAL. FOR LARGE: EXCLUDE PERSONS NOT WEARING PROTECTIVE EQUIPMENT UNTIL CLEANUP HAS BEEN COMPLETED. STOP AT SOURCE, DIKE AREA TO PREVE NT SPREADING, PUMP LIQUID TO SALVAGE TANK. REMAINING LIQUID MAY BE TAKEN UP ON SAND, CLAY, EARTH, FLOOR ABSORBENT/OTHER ABSORBENT MATERIAL & SHOVELED INTO CONTAINERS.

Other Precautions:CONTAINERS MAY BE HAZARDOUS WHEN EMPTIED. SINCE EMPTIED CONTAINERS RETAIN PRODUCT RESIDUES, PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERVED.

======= Exposure Controls/Personal Protection =========

Respiratory Protection: IF WORKPLACE EXPOSURE LIMITS IS EXCEEDED, A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL.

Ventilation:PROVIDE SUFFICIENT MECHANICAL GENERAL/LOCAL EXHAUST VENTILATION TO MAINTAIN EXPOSURE BELOW TLVS.

Protective Gloves:NEOPRENE, NITRILE RUBBER, POLYVINYL CHLORIDE Eye Protection:CHEMICAL SPLASH GOGGLES IN COMPLIANCE W/OSHA

REGULATIONS.

Other Protective Equipment: IMPERVIOUS CLOTHING & BOOTS Work Hygienic Practices: REMOVE/LAUNDER CONTAMINATED CLOTHING & SHOES BEFORE REUSE. Supplemental Safety and Health Boiling Pt:=165.6C, 330.F Vapor Pres:18 Spec Gravity:1.127 pH:10-11 Appearance and Odor:LIQUID Stability Indicator/Materials to Avoid:YES STRONG OXIDIZING AGENTS Hazardous Decomposition Products: CO2, CO, VARIOUS HYDROCARBONS Waste Disposal Methods: DESTROY BY LIQUID INCINERATION. DISPOSE OF IN ACCORDANCE W/LOCAL, STATE & FEDERAL REGULATIONS.

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