

OLD WORLD INDUSTRIES INC -- PEAK ANTIFREEZE & COOLANT -- 6850-00-135-2850  
===== Product Identification ===== Product ID:PEAK  
ANTIFREEZE & COOLANT MSDS Date:02/16/2001 FSC:6850 NIIN:00-135-2850 Status  
Code:A MSDS Number: CLRZC  
==== Responsible Party ==== Company Name:OLD WORLD INDUSTRIES INC Address:4065  
COMMERCIAL AVE City:NORTHBROOK State:IL ZIP:60062-1851 Country:US Info Phone  
Num:847-559-2000/2116/FAX: 847-559-2173 Emergency Phone Num:(800)424-9300 Chemtrec  
Ind/Phone:(800)424-9300 CAGE:0U3B1  
==== Contractor Identification ==== Company Name:OLD WORLD INDUSTRIES INC  
Address:4065 COMMERCIAL AVE Box:City:NORTHBROOK State:IL ZIP:60062-1851  
Country:US Phone:847-559-2000/2116/FAX: 847-559-2173 CAGE:0U3B1  
===== Composition/Information on Ingredients ===== Ingrid  
Name:ETHYLENE GLYCOL CAS:107-21-1 RTECS #:KW2975000 Minumum % Wt:90.  
Maxumum % Wt:95. OSHA PEL:50 PPM ACGIH TLV:50 PPM ACGIH STEL:C127 MG/M3;C50  
PPM EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB Ingrid Name:DIETHYLENE GLYCOL CAS:111-46-6  
RTECS #:ID5950000 Minumum % Wt:0. Maxumum % Wt:5. OSHA PEL:NONE ACGIH  
TLV:NONE Ingrid Name:DI POTASSIUM PHOSPHATE CAS:7758-11-4 Minumum % Wt:1.  
Maxumum % Wt:2. OSHA PEL:NONE ACGIH TLV:NONE  
===== Hazards Identification ===== LD50 LC50  
Mixture:ORAL, RATS, LD50: 5840 MG/KG (107-21-1) Routes of Entry: Inhalation:YES  
Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:UNKNOWN OSHA:NO  
Health Hazards Acute and Chronic:EMERGENCY OVERVIEW: SLIGHT ODOR. MAY BE  
FATAL IF SWALLOWED. VAPORS CAN CAUSE EYE IRRITATION. HEALTH HAZARDS:  
INHALATION, SKIN, INGESTION: MAY CAUSE SKIN, EYE AND MUCOUS MEMBRANE  
IRRITATION. INHALATION OF HIGH CONCENTRATIONS OF MIST OR VAPORS MAY  
CAUSE NAUSEA, CENTRAL NERVOUS SYSTEM DEPRESSION, LETHARGY. Explanation of  
Carcinogenicity:THE ABSENCE OF CARCINOGENIC POTENTIAL FOR ETHYLENE GLYCOL  
HAS BEEN SUPPORTED BY NUMEROUS IN VITRO GENOTOXICITY STUDIES SHOWING  
THAT IT DOES NOT PRODUCE MUTAGENIC OR CLASTOGENIC EFFECTS.NO EVIDENCE  
FOR CARCINOGENICITY WAS FOUND WITH A CHRONIC SKIN-PAINTING STUDY WITH  
DIETHYLENE GLYCOL IN MICE. Effects of Overexposure:SKIN, EYE AND MUCOUS  
MEMBRANE IRRITATION, LETHARGY, NAUSEA, DEFATTING OF SKIN, CNS  
DEPRESSION. ===== First Aid Measures  
===== First Aid:EYES: FLUSH WITH WATER FOR 15 MINUTES,  
LIFTING LOWER AND UPPER LIDS. GET MEDICAL ATTENTION. CONTACT LENSES  
SHOULD NOT BE WORN WHEN WORKING WITH THIS CHEMICAL. SKIN: FLUSH  
EXPOSED SKIN AREA WITH WATER FOR 15 MINUTES WHILE REMOVING  
CONTAMINATED CLOTHING. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.  
WASH CLOTHING BEFORE RE-USE. INHALATION: MOVE TO FRESH AIR AND GET  
EMERGENCY MEDICAL CARE. IF NOT BR EATHING, GIVE ARTIFICIAL RESPIRATION. IF  
BREATHING IS DIFFICULT, GIVE OXYGEN. INGESTION: GET MEDICAL ATTENTION. IF  
PERSON IS FULLY CONSCIOUS, GIVE TWO GLASSES OF WATER. DO NOT INDUCE  
VOMITING. IF MEDI CAL ADVICE (CONTD. SEE "OTHER INFO") =====  
Fire Fighting Measures ===== Flash Point Method:SCC Flash  
Point:=-119.4C, 247.F Autoignition Temp:=-397.8C, 748.F Lower Limits:3.2 Upper Limits:15.3  
Extinguishing Media:WATER FOG OR FINE SPRAY, CO2, DRY CHEMICAL, ALCOHOL  
RESISTANT FOAMS (ATC TYPE), SYNTHETIC FOAMS (INCLUDING AFFF), PROTEIN  
FOAMS. DO NOT USE DIRECT WATER STREAM, MAY SPREAD FIRE. Fire Fighting  
Procedures:WEAR POSITIVE-PRSSURE, SELF-CONTAINED BREATHING APPARATUS  
(SCBA) AND PROTECTIVE FIRE FIGHTING CLOTHING (INCLUDES FIRE-FIGHTING  
HELMET, COAT, PANTS, BOOTS AND GLOVES). Unusual Fire/Explosion Hazard:NO FIRE

AND EXPLOSION HAZARDS EXPECTED UNDER NORMAL STORAGE AND HANDLING CONDITIONS (I.E. AMBIENT TEMPERATURES). HOWEVER, ETHYLENE GLYCOL OR SOLUTIONS OF ETHYLENE GLYCOL AND WATER CAN FORM FLAMMABLE V APORS WITH AIR IF HEATED SUFFICIENTLY. KEEP PEOPLE AWAY. ISOLATE FIRE AREA AND DENY UNECESSARY ENTRY.

===== Accidental Release Measures ===== Spill Release Procedures:PROTECT PEOPLE: MATERIAL IS MODERATELY TOXIC WHEN INGESTED. TAKE ADEQUATE PRECATIONS TO KEEP PEOPLE, ESPECIALLY CHILDREN AWAY FROM SPILL SITE. PVC-COATED RUBBER GLOVES AND MONOGOGGLES OR FACESHIELD CA N BE USED DURING CLEANUP OF SPILL SITE. PRODUCT ON SURFACES CAN CAUSE SLIPPERY CONDITIONS. (SEE OTHER PRECAUTIONS)

===== Handling and Storage ===== Handling and Storage Precautions:PRODUCT MAY FREESE BELOW -18C (0 F). DO NOT STORE NEAR FOOD, FOODSTUFFS, DRUGS, OR POTABLE WATER SUPPLIES. KEEP CONTAINER CLOSED WHEN NOT IN USE. STORE AWAY FROM HEAT OR OPEN FLAME. USE NORMAL PRECAU TIONS IN HANDLING ANY COMBUSTIBLE LIQUID. Other Precautions:(CONTD. FROM "RELEASE"): USE CARE, CLEANLINESS. AVOID BREATHING MISTS. DO NOT DUMP PRODUCT INTO SEWERS, ON GROUND, INTO BODY OF WATER. SMALL SPILL: SOAK UP WITH ABSORBENT MATERIAL. LARGE SPILLS: DIKE AND PUMP INTO SUITABLE CONTAINERS FOR DISPOSAL. COMPLY WITH APPLICABLE STATUES FOR NOTIFICATION OFAP PROPRIATE OFFICIALS.

===== Exposure Controls/Personal Protection ===== Respiratory Protection:RESPIRATORY PROTECTION REQUIRED IF TLV EXCEEDED. ANY SELF-CONTAINED, OR SUPPLIED-AIR WITH AUXILIARY SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACEPIECE AND OPERATED IN PRESSURE-DEMAND OR OTHER PO SITIVE PRESSURE MODE . Ventilation:USE GENERAL OR LOCAL EXHAUST VENTILATION TO MEET TLV REQUIREMENTS. Protective Gloves:POLYETHYLENE ; NEOPRENE, NITRILE; POLYVINYL ALCOHOL; NATURAL RUBBER, BUTYL. Eye Protection:SAFETY GOGGLES AND FACE SHIELD. Other Protective Equipment:EMERGENCY EYEWASH SHOULD BE AVAILABLE. CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH THIS CHEMICAL. Supplemental Safety and Health

===== Physical/Chemical Properties ===== HCC:V5 Boiling Pt:>170.6C, 339.F B.P. Text:339F T0 348 F Melt/Freeze Pt:=-17.6C, 0.F Vapor Pres:<0.1 MM HG @20C Vapor Density:2.1(AIR=1) Spec Gravity:1.12 (H20=1)(9.3 LBS/GAL) Evaporation Rate & Reference:NIL Solubility in Water:COMPLETE Appearance and Odor:GREEN LIQUID, MILD ODOR. Percent Volatiles by Volume:97.0

===== Stability and Reactivity Data ===== Stability Indicator/Materials to Avoid:YES STRONG ACID OR OXIDIZING AGENTS. Stability Condition to Avoid:KEEP AWAY FROM FLAME. Hazardous Decomposition Products:INCOMPLETE COMBUSTION MAY PRODUCE CARBON MONOXIDE GAS. Conditions to Avoid Polymerization:WILL NOT OCCUR.

===== Toxicological Information ===== Toxicological Information:INGESTION: THE LETHAL DOSE IN HUMANS IS ESTIMATED TO BE 100 ML(3 OZ). THE ORAL, RAT, LD50 IS IN THE 6000-13,000-MG/KG RANGE. IN VITRO MUTAGENICITY STUDIES WERE NEGATIVE. ANIMAL MUTAGENICITY STUDIES WE RE NEGATIVE. ETHYLENE GLYCOL HAS BEEN SHOWN TO PRODUCE DOSE-RELATED TERATOGINC EFFECTS IN RATS AND MICE WHEN GIVEN BY GAVAGE OR IN DRINKING WATER AT HIGH CONCENTRAIONS OR DOSES. THE NO-EFFECT DOSES FO R DEVELOPMENTAL TOXICITY FOR ETHYLENE GLYCOL GIVEN BY GAVAGE OVER THE PERIOD OF ORGANOGENESIS HAS BEEN SHOE TO BE 150 MG/,KG/DAY FOR THE

MOUSE AND 500 MG/KG/DAY FOR THE RAT. SEE MANUFACTURER'S MSDS FOR MORE DETAILED TOXICOLOGICAL DATA.

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Ecological Information  
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Ecological:ENVIRONMENTAL FATE: MOVEMENT & PARTITIONING: BIOCONCENTRATION POTENTIAL IS LOW. DEGRADATION & TRANSFORMATION: BIODEGRADATION UNDER AEROBIC STATIC LABORATORY CONDITIONS IS HIGH. DEGRADATION IS EXPECTED IN THE ATMOSPHERIC ENVIRONMENT WITHIN DAYS TO WEEKS. ECOTOXICOLOGY: MATERIAL IS PRACTICALLY NON-TOXIC TO AQUATIC ORGANISMS ON AN ACUTE BASIS (LC50 GREATER THAN 100 MG/L IN MOST SENSITIVE SPECIES). SEE MANUFACTURER'S MSDS FOR FURTHER MORE DETAILED DATA.

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Disposal Considerations  
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Waste Disposal Methods:DO NOT DUMP USED PRODUCT OR DILUTED MATERIAL INTO SEWERS, ON GROUND, OR INTO ANY BODY OF WATER. SPILLS: ENSURE COMPLIANCE WITH ALL APPLICABLE STATUES THAT REQUIRE NOTIFICATION OF APPRPRIATE GOVERNMENT OFFICIALS. DISPOSAL: NO INFORMATION PROVIDED BY MANUFACTURER.

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MSDS Transport Information  
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Transport Information:DOT: NON-BULK. PROPER SHIPPING NAME: ETHYLENE GLYCOL (PEAK). BULK: PROPER SHIPPING NAME: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID N.O.S. (ETHYLENE GLYCOL) TECHNICAL NAME: ETHYLENE GLYCOL. ID NUMBER : UN 3082, HAZARD CLASS: 9, PACKING GROUP: PG III, REPORTABLE QUANTITY: 5,000 LB. IATA: NON-BULK, NOT REGULATED. THIS NSN UNIT OF ISSUE IS FOR 1 GALLON CONTAINERS. LESS THAN RQ VALUE, THEREFORE, NOT REGULATED FOR TRANSPORTATION.

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Regulatory Information  
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SARA Title III Information:SECTION 311/312-CATEGORIES: ACUTE HAZARD; CHRONIC HAZARD. SECTION 312-INVENTORY REPORTING: ETHYLENE GLYCOL IS SUBJECT TO TIER I AND / OR TIER II ANNUAL INVENTORY REPORTING. SECTION 313- EMISSION REPORTING: ETHYLENE GLYCOL IS SUBJECT TO FORM R REPORTING REQUIREMENTS. SECTION 302-EXTREMELY HAZARDOUS SUBSTANCES: ETHYLENE GLYCOL IS NOT LISTED. Federal Regulatory Information:U.S. TSCA: ETHYLENE GLYCOL (107-21-1): INVENTORY: LISTED. WATER STANDARDS: NO DATA AVAILABLE. ATMOSPHERIC STANDARDS: ETHYLENE GLYCOL (107-21-1): CLEAN AIR ACT (1990): LIST OF HAZARDOUS AIR CONTAMINANTS: LISTED. CERCLA: REPORTABLE QUANTITY (RQ): 5,000 POUNDS (532 GALLONS). (CONTD. FROM "STATE REGULATORY") MN-HAZ. SUBS. LIST: LISTED (PARTICULATE AND VAPOR); NJ- RIGHT TO KNOW LIST (TOTAL): PRESENT GREATER THAN 1.0%; PA RIGHT-TO-KNOW LIST: ENVIRONMENTAL HAZARD.

State Regulatory Information:CA PROP 65): PRODUCT CONTAINS FOLLOWING CHEMICALS KNOWN TO STATE OF CA TO CAUSE CANCER: 1,4-DIOXANE, 123-91-1, <=0.0086%; ACETALDEHYDE, CAS# 75-07-0, <=0.1000 PPM. CA PROP 65: PRODUCT CONTAINS FOLLOWING CHEMICAL KNOWN TO CA TO CAUSE BIRTH DEFECTS AND OTHER REPRODUCTIVE HARM: ETHYLENE GLYCOL MONOMETHYL ETHER, 109-86-4, <=0.0009%. CA SCAQMD RULE 443.1: VOC: VP 0.06 MM HG @20C, 1113.38 G/L. STATE RIGHT TO KNOW: CA-EXPOSURE LIMITS-CEILINGS:VAPOR-50 PPM CEILING; 125 MG/M3 CEILING. DIRECTOR'S LIST OF HAZARDOUS SUBSTANCES: LISTED; FL-HAZARDOUS SUBSTANCES LIST: LISTED; MA-RIGHT-TO-KNOW LIST: LISTED; (CONTD. SEE "FEDERAL REGULATORY")

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Other Information  
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