

HUNTSMAN PETROCHEMICAL CORPORATION -- ETHYLENE GLYCOL -- 6810-00-006-4205
===== Product Identification =====

Product ID:ETHYLENE GLYCOL
MSDS Date:02/12/1997
FSC:6810
NIIN:00-006-4205
Status Code:A
MSDS Number: CKQDY
=== Responsible Party ===
Company Name:HUNTSMAN PETROCHEMICAL CORPORATION
Box:27707
City:HOUSTON
State:TX
ZIP:77227-7707
Country:US
Info Phone Num:409-722-9673(MEDICAL)/713-235-6432
E
mergency Phone Num:409-727-0831
Preparer's Name:PHILLIP B. VALKOVICH
Chemtec Ind/Phone:(800)424-9300
CAGE:LO053
=== Contractor Identification ===
Company Name:HUNTSMAN PETROCHEMICAL CORPORATION
Box:27707
City:HOUSTON
State:TX
ZIP:77227-7707
Country:US
Phone:512-459-6543/713-235-6432(MSDS)
CAGE:LO053

===== Composition/Information on Ingredients =====

Ingred Name:1,2-ETHANEDIOL
CAS:107-21-1
RTECS #:KW2975000
Minumum % Wt:95.
Maxumum % Wt:99.99
ACGIH STEL:C127 MG/M3;C50 PPM
EPA

Rpt Qty:1 LB
DOT Rpt Qty:1 LB

===== Hazards Identification =====

LD50 LC50 Mixture:DERMAL LD50(RABBIT): >1.00-2.00 G/KG

Health Hazards Acute and Chronic:ACUTE: EYE-MAY CAUSE IRRITATION.

SKIN-BRIEF CONTACT MAY CAUSE SLIGHT IRRITATION. OTHER THAN THE POTENTIAL SKIN IRRITATION EFFECTS NOTED, ACUTE (SHORT TERM) ADVERSE AFFECTS ARE NOT EXPECTED FROM BRIEF SKIN CONTACT.

INHALATION-VAPORS OR MIST, IN EXCESS OF PERMISSIBLE CONCENTRATION, OR IN UN

USUALLY HIGH CONCENTRATIONS GENERATED FROM SPRAYING, HEATING THE MATERIAL OR AS FROM EXPOSURE IN POORLY VENTILATED AREAS OR CONFINED SPACES MAY CAUSE IRRITATION OF THE NOSE & THROAT. INGESTION-ASPIRATION MAY OCCUR DURING SWALLOWING OR VOMITING, RESULTING IN LUNG DAMAGE. CHRONIC: REPEATED INGESTION MAY CAUSE KIDNEY DAMAGE.

Effects of Overexposure:EYE-MILD DISCOMFORT & SLIGHT EXCESS REDNESS OF THE EYE. SKIN-LOCAL REDNESS & SWELLING. INHALATION-HEADACHE, NAUSEA & DROW

SINESS. INGESTION-SYMPTOMS INCLUDE HEADACHE, WEAKNESS, CONFUSION, DIZZINESS, STAGGERING, SLURRED SPEECH, LOSS OF COORDINATION, FAINTNESS, NAUSEA & VOMITING, INCREASED HEART RATE, DECREASED BLOOD PRESSURE, DIFFICULTY BREATHING & SEEING, PULMONARY EDEMA, UNCONSCIOUSNESS, CONVULSION, COLLAPSE & COMA. SYMPTOMS MAY BE DELAYED. DECREASED URINE OUTPUT & KIDNEY FAILURE MAY ALSO OCCUR. SEVERE POISONING MAY CAUSE DEATH.

Medical Cond Aggravated by Exposure:BECAUSE OF ITS IRRITATING

PROPERTIES, REPEATED SKIN CONTACT MAY AGGRAVATE AN EXISTING DERMATITIS (SKIN CONDITION). REPEATED OVEREXPOSURE MAY AGGRAVATE EXISTING KIDNEY DISEASE.

===== First Aid Measures =====

First Aid:EYE-IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR 15 MINS. HOLD EYELIDS APART WHILE FLUSHING. GET MEDICAL AID. SKIN-WASH SKIN WITH PLENTY OF SOAP & WATER FOR SEVERAL MINS. GET MEDICAL AID IF IRRITATION PERSISTS. INGESTION-IF PERSON IS CONSCIOUS

& CAN

SWALLOW, IMMEDIATELY GIVE 2 GLASSES OF WATER. DO NOT INDUCE VOMITING. IF VOMITING OCCURS, GIVE FLUIDS AGAIN. HAVE PHYSICIAN DETERMINE IF CONDITION OF PERSON WILL PERMIT INDUCTION OF VOMITING OR EVACUATION OF STOMACH. INHALATION-REMOVE TO FRESH AIR. IF NOT BREATHING, CLEAR AIRWAY & GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, QUALIFIED PERSONNEL MAY GIVE OXYGEN. GET MEDICAL AID.

===== Fire Fighting Measures =====

Flash Point Method:PMCC

Flash Point:117.8C, 244.F

Extinguishing Media:USE WATER SPRAY, DRY CHEMICAL, FOAM, OR CARBON DIOXIDE TO EXTINGUISH FLAMES. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS. WATER OR FOAM MAY CAUSE FROTHING.

Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND POSITIVE PRESSURE BREATHING APPARATUS. APPROACH FIRE FROM UPWIND TO AVOID HAZARDOUS VAPORS AND TOXIC DECOMPOSITION PRODUCTS.

Unusual Fire/Explosion Hazard:NONE

===== Accidental Release Measures =====

Spill Release Procedures:VENTILATE AREA. AVOID BREATHING VAPOR. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT, INCLUDING APPROPRIATE RESPIRATORY PROTECTION. CONTAIN SPILL IF POSSIBLE. WIPE UP OR ABSORB ON SUITABLE MATERIAL AND SHOVEL UP. PREVENT ENTRY INTO SEWERS AND WATERWAYS. AVOID CONTACT WITH SKIN, EYES OR CLOTHING.

===== Handling and Storage =====

Handling and Storage Precautions:MINIMUM FEASIBLE HANDLING TEMPERATURE

SHOULD BE MAINTAINED. PERIODS OF EXPOSURE TO HIGH TEMPERATURES SHOULD BE MINIMIZED. WATER CONTAMINATION SHOULD BE AVOIDED.

Other Precautions:WARNING STATEMENT: HARMFUL IF SWALLOWED. MAY CAUSE DIZZINESS & DROWSINESS. MAY CAUSE EYE IRRITATION. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS & CAUSE DAMAGE. FOR INDUSTRIAL USE ONLY. CAN CAUSE LIVER & KIDNEY DAMAGE IF SWALLOWED.

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

Respiratory Pr

Protection: IF VAPOR, MIST OR DUST IS GENERATED & THE OCCUPATIONAL EXPOSURE LIMIT OF THE PRODUCT IS EXCEEDED, USE APPROPRIATE NIOSH/MSHA APPROVED AIR PURIFYING/AIR SUPPLIED RESPIRATOR AFTER DETERMINING THE AIRBORNE CONCENTRATION OF THE CONTAMINANT. AIR SUPPLIED RESPIRATORS SHOULD ALWAYS BE WORN WHEN AIRBORNE CONCENTRATIONS OF THE CONTAMINANT OR OXYGEN CONTENT IS UNKNOWN.

Ventilation: ADEQUATE TO MEET OCCUPATIONAL EXPOSURE LIMITS.

Protective Gloves: WORKERS SHOULD WASH EXPOSED SKIN SEVERAL TIMES DAILY WITH SOAP AND WATER.

Eye Protection: SAFETY GLASSES. CHEMICAL-TYPE GOGGLES OR FACE SHIELD RECOMMENDED

Work Hygienic Practices: SOILED WORK CLOTHING SHOULD BE LAUNDERED OR DRY-CLEANED.

Supplemental Safety and Health

PRODUCT CODE: EGIND. *** ATTENTION: CONTAINS ETHYLENE GLYCOL WHICH MAY CAUSE BIRTH DEFECT BASED ON ANIMAL DATA. THIS PRODUCT IS NOT TO BE USED IN FOOD, DRUG, COSMETIC OR POTABLE WATER APPLICATIONS.

===== Physical/Chemical Properties =====

HCC: V5

Boiling Pt: =197.8C, 388.F

Melt/Freeze Pt: =-13.3C, 8.1F

Vapor Pres: .1 MMHG AT 20C(68F)

Vapor Density: 2.1

Spec Gravity: 1.12

pH: 6.5

Viscosity: 18.7 CST AT 20C(68F)

Solubility in Water: >10

Appearance and Odor: COLORLESS LIQUID, MILD ODOR.

===== Stability and Reactivity Data =====

Hazardous Decomposition Products: TOXIC LEVELS OF CARBON MONOXIDE, CARBON DIOXIDE IRRITATING ALDEHYDES AND KETONES MAY BE FORMED ON BURNING. HEATING IN AIR

MAY PRODUCE IRRITATING ALDEHYDES, ACIDS, AND KETONES.

Conditions to Avoid Polymerization: WILL NOT OCCUR.

===== Toxicological Information =====

Toxicological Information: ORAL: ANIMAL DATA DOES NOT REFLECT HUMAN TOXICITY. INHALATION: NOT DETERMINED. IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES) SKIN: (DRAIZE) BELIEVED TO BE >0.50-1.00/8.0 (RABBIT) SLIGHTLY IRRITATING. EYES: (DRAIZE) BELIEVED TO BE 15.00-25.00/110 (RABBIT) SLIGHTLY IRRITATING.

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SENSITIZATION: NOT DETERMINED. OTHER: ORAL ADMINISTRATION OF ETHYLENE GLYCOL TO PREGENANT EXPERIMENTAL ANIMALS HAS BE EN SHOWN TO CAUSE DEFECTS IN THE OFFSPRING. THSES AFFECTS WERE NOT SEEN WHEN ETHYLENE GLYCOL WAS ADMINISTERED BY DERMAL APPLICATION OR BY INHALATION.

===== Ecological Information =====

Ecological:THIS PRODUCT IS POTENTIALLY BIODEGRADABLE. AQUATIC TOXICITY: LC50-96HR AQUATIC TOXICITY RATING IS BELIEVED TO BE >100.00

MG/LITER PRACTICALLY NON-TOXIC. MOBILITY: NOT DETERMINED. PERSISTANCE AND BIODE GRADIBILITY: THIS PRODUCT IS REPORTED TO HAVE A MODERATE RATE OF BIODEGRADATION; GREATER THAN OR EQUAL TO 30% DEGRADATION OVER A TEST PERIOD OF 28 DAYS OR LESS. POTENTIAL TO BIOACCUMULATE: THIS PRODUC T IS REPORTED TO HAVE A LOW POTENTIAL TO BIOCONCENTRATE.

===== Disposal Considerations =====

Waste Disposal Methods:THIS PRODUCT HAS BEEN EVALUATED FOR RCRA C HARACTERISTICS AND DOES NOT MEET THE CRITERIA OF A HAZARDOUS WASTE IF DISCARDED IN ITS PURCHASED FORM. UNDER RCRA, IT IS THE RESPONSIBILITY OF THE USER OF THE PRODUCT TO DETERMINE AT THE TIME OF DISPOSAL, WHETHER THE PRODUCT MEETS RCRA CRITERIA FOR HAZARDOUS WASTE.

===== MSDS Transport Information =====

Transport Information:NOT REGULATED.

===== Regulatory Information =====

SARA Title III Information:SECTION 30
2/304 EXTREMELY HAZARDOUS

SUBSTANCES: NONE. SECTION 311 HAZARDOUS CATEGORIZATION: ACUTE: X. CHRONIC: X. FIRE. PREEASURE. REACTIVE. SECTION 313 TOXIC CHEMICAL: 1,2-ETHANEDIOL (COMMON NAME-ETHY LENE GLYCOL), CAS# 107-21-1, CONCENTRATION 95-99.99.

Federal Regulatory Information:THIS PRODUCT IS CONSIDERED HAZARDOUS ACCORDING TO OSHA (1910.1200). CERCLA 102(A)/DOT HAZARDOUS SUBSTANCES: 1,2-ETHANEDIOL (COMMON NAME-ETHYLENE GLYCOL), CAS# 107-21-1, CONCENTRATION 95-99.99.

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te Regulatory Information:FLORIDA, ILLINOIS, MASSACHUSETTES, NEW
JERSEY, PENNSYLVANIA, RHODE ISLAND. CALIFORNIA PROPOSITION 65:
NONE.

===== Other Information =====

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