

PHOENIX INDUSTRIES INC -- ETHYLENE GLYCOL, TECHNICAL -- 6810-00-006-4205

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Product Identification
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Product ID:ETHYLENE GLYCOL, TECHNICAL

MSDS Date:05/03/1999

FSC:6810

NIIN:00-006-4205

Status Code:A

MSDS Number: CKKRC

=== Responsible Party ===

Company Name:PHOENIX INDUSTRIES INC

Address:11028 S LEADBETTER RD UNIT 10

City:ASHLAND

State:VA

ZIP:23005

Country:US

Info Phone Num:804-264-5183

E

Emergency Phone Num:800-424-8802 NAT RESP CTR

Chemtrec Ind/Phone:(800)424-9300

CAGE:0YED2

=== Contractor Identification ===

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLAYNE PARKWAY

Box:City:RICHMOND

State:VA

ZIP:23222

Country:US

Phone:804-264-5183/FAX: 264-5535

Contract Num:SP0450-00-M-SB23

CAGE:0YED2

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Composition/Information on Ingredients
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Ingred Name:ETHYLENE GLYCOL

CAS:107-21-1

RTECS #:KW2975000

Minimum % Wt:99.

Maximum % Wt:100.

ACGIH STEL:C127 MG/M

3;C50 PPM
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

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

LD50 LC50 Mixture:ORAL RAT LD50: 4700 MG/KG

Reports of Carcinogenicity:NTP:NO IARC:NO

Health Hazards Acute and Chronic:INHALATION: VAPOR INHALATION NOT A PROBLEM UNLESS HEATED OR MISTED. EXPOSURE TO VAPORS OVER AN EXTENDED TIME HAS CAUSED THROAT IRRITATION & HEADACHE. MAY CAUSE PULMONARY EDEMA & CENTRAL NERVOUS SYSTEM DEPRESSION. HAS PRODUCED RAPID, INVOLUNTARY E

YE MOVEMENT& COMA. INGESTION: INITIAL SYMPTOMS

IN MASSIVE DOSAGE PARALLEL INTOXICATION, PROGRESSING TO CNS DEPRESSION. DEATH FROM RESPIRATORY ARREST OR CARDIOVASCULAR COLLAPSE MAY FOLLOW. SKIN CONTACT: MINOR SKIN IRRITATION & PENETRATION MAY OCCUR. EYE CONTACT: IRRITATION, PAIN, EYE DAMAGE. CHRONIC: SEVERE KIDNEY PROBLEMS, BRAIN DAMAGE, SKIN ALLERGY CAN DEVELOP. MAY DAMAGE DEVELOPING FETUS.

Explanation of Carcinogenicity:INGREDIENT: ETHYLENE GLYCOL, CAS # 107-21-1:

NTP CARCINOGE: NO; IARC CATEGORY: NONE.

Effects of Overexposure:INHALATION: NAUSEA, VOMITING, DIZZINESS & DROWSINESS, RAPID, INVOLUNTARY EYE MOVEMENT & COMA. INGESTION: , VOMITING, HEADACHE, RAPID RESPIRATORY AND HEART RATE, LOWERED BLOOD PRESSURE, STUPOR, COLLAPSE, AND UNCONSCIOUSNESS WITH CONVULSIONS.

Medical Cond Aggravated by Exposure:PERSONS WITH PRE-EXISTING SKIN DISORDERS, EYE PROBLEMS, OR IMPAIRED LIVER, KIDNEY, OR RESPIRATORY FUNCTION MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS SUBSTANCE.

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

First Aid:INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN. INGESTION: INDUCE VOMITING IMMEDIATELY AS DIRECTED BY MEDICAL PERSONNEL. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION. SKIN: REMOVE ANY CONTAMINATED CLOTHING. WASH SKIN WITH SOAP AND WATER FOR AT LEAST

15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS OR PERSISTS. EYE: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES, LIFTING LOWER AND UPPER LIDS OCCASIONALLY. GET MEDICAL ATTENTION IMMEDIATELY.

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

Flash Point Method:CC

Flash Point:=111.C, 231.8F

Autoignition Temp:=398.C, 748.4F

Lower Limits:3.2

Upper Limits:15.3

Extinguishing Media:DRY CHEMICAL, FOAM OR CARBON DIOXIDE. WATER OR FOAM MAY CAUSE FROTHING. WATER SPRAY MAY BE USED TO EXTINGUISH SURROUNDING FIRE AND COOL EXPOSED CONTAINERS. WATER SPRAY WILL ALSO REDUCE

Fire Fighting Procedures:IN THE EVENT OF FIRE, WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE PRESSURE DEMAND OR OTHER POSITIVE PRESSURE MODE. TOXIC GASES AND VAPORS MAY BE RELEASED IF INVOLVED IN A FIRE.

Unusual Fire/Explosion Hazard:ABOVE FLASH POINT, VAPOR-AIR MIXTURES ARE

EXPLOSIVE WITHIN FLAMMABLE LIMITS NOTED ABOVE. CONTAINERS MAY EXPLODE WHEN INVOLVED IN FIRE.

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

Spill Release Procedures:VENTILATE AREA OF LEAK OR SPILL. REMOVE ALL SOURCES OF IGNITION. WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. ISOLATE HAZARD AREA. KEEP UNNECESSARY & UNPROTECTED PERSONNEL FROM ENTERING. CONTAIN AND RECOVER LIQUID WHEN POSSIBLE FROM ENTERING. CONTAIN AND RECOVER LIQUID WHEN

POSSIBLE. USE

NON-SPARKING TOOLS & EQUIPMENT. COLLECT LIQUID IN AN APPROPRIATE CONTAINER OR ABSORB WITH AN INERT MATERIAL.

Neutralizing Agent:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

Handling and Storage Precautions:KEEP IN A TIGHTLY CLOSED CONTAINER, STORED IN A COOL, DRY, VENTILATED AREA. PROTECT AGAINST PHYSICAL DAMAGE. SEPARATE FROM ACIDS AND OXIDIZING MATERIALS. CONTAINERS OF THIS MATERIAL MAY BE HAZAR

DOUS W HEN EMPTY SINCE THEY RETAIN
PRODUCT RESIDUE (VAPORS, LIQUID); OBSERVE ALL WARNINGS AND
PRECAUTIONS L

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

Respiratory Protection:IF THE EXPOSURE LIMIT IS EXCEEDED, A HALF-FACE
RESPIRATOR WITH AN ORGANIC VAPOR CARTRIDGE AND DUST/MIST FILTER MAY
BE WORN FOR UP TO TEN TIMES THE EXPOSURE LIMIT OR THE MAXIMUM USE
CONCENTRATION SPECI FIED BY THE APPROPRIATE REGULATORY AGENCY OR
RESPIRATOR SUPPLIER, WHICHEVE

R IS LOWEST.

Ventilation:A SYSTEM OF LOCAL OR GENERAL EXHAUST IS RECOMMENDED TO KEEP
EMPLOYEE EXPOSURES BELOW THE AIRBORNE EXPOSURE LIMITS. LOCAL
EXHAUST VENTILATION IS PREFERED.

Protective Gloves:WEAR PROTECTIVE GLOVES.

Eye Protection:USE CHEMICAL SAFETY GOGGLES.

Other Protective Equipment:WEAR CLEAN BODY-COVERING CLOTHING. MAINTAIN
EYE WASH FOUNTAIN AND QUICK DRENCH FACILITIES IN WORK AREA.

Work Hygienic Practices:NO DATA PROVIDED BY RESPONSIBLE PARTY.

Supplemental Safety and Health

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NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

HCC:V5

Boiling Pt:=197.6C, 387.7F

Melt/Freeze Pt:=-13.C, 8.6F

Vapor Pres:0.06@20C

Vapor Density:2.14

Spec Gravity:1.1 (20C)

Solubility in Water:MISCIBLE

Appearance and Odor:CLEAR OILY LIQUID; ODORLESS

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS.REACTS VIOLENTLY WITH CHLOROSULFONIC ACID,
OLE

UM, SULFURIC ACID, PERCHLORIC ACID. CAUSES IGNITION WITH CHLORINE TRIOXIDE, POTASSIUM PERMANGANATE, SODIUM PEROXIDE, AMMONIUM DICHROMATE, SILVER CHLORATE, SO

Stability Condition to Avoid: HEAT, FLAMES, IGNITION SOURCES, WATER (ABSORBS READILY) AND INCOMPATIBLES.

Hazardous Decomposition Products: CARBON DIOXIDE AND CARBON MONOXIDE MAY FORM WHEN HEATED TO DECOMPOSITION. MAY PRODUCE ACRID AND IRRITATING FUMES WHEN HEATED TO DECOMPOSITION.

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Toxicological Information: ORAL RAT LD50: 4700 MG/KG; SKIN RABBIT LD50: 9530 MG/KG; IRRITATION-SKIN RABBIT: 555 MG (OPEN), MILD; EYE RABBIT: 500 MG/24H, MILD. INVESTIGATED AS TUMORIGEN, MUTAGEN, REPRODUCTIVE EFFECTOR. REPRODUCTIVE TOXICITY: HAS SHOWN TERATOGENIC EFFECTS IN LABORATORY ANIMALS. CANCER LISTS: INGREDIENT: ETHYLENE GLYCOL, CAS # 107-21-1: NTP CARCINOGEN: NO; IARC CATEGORY: NONE.

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Ecological: MATERIAL IS EXPECTED TO BIODEGRADE READILY WHEN RELEASED TO SOIL; PRODUCT IS EXPECTED TO LEACH INTO GROUNDWATER; MATERIAL IS NOT EXPECTED TO EVAPORATE SIGNIFICANTLY. WHEN RELEASED TO WATER: MATERIAL IS EXPECTED TO HAVE A HALF-LIFE BETWEEN 1-10 DAYS; IS NOT EXPECTED TO BIOACCUMULATE SIGNIFICANTLY; HAS LOG OCTANOL-WATER COEFFICIENT OF LESS THAN 3.0; IS NOT EXPECTED TO EVAPORATE SIGNIFICANTLY. WHEN RELEASED TO AIR: PRODUCT IS EXPECTED TO BE RAPIDLY DEGRADED BY REACTION WITH PHOTOCHEMICALLY PRODUCED HYDROXYL RADICALS; EXPECTED TO HAVE A HALF-LIFE OF BETWEEN 1-10 DAYS. ENVIRONMENTAL TOXICITY: LC50/ 96 HR FISH: >100 MG/L.

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Waste Disposal Methods: PROCESSING, USE OR CONTAMINATION OF THIS PRODUCT MAY CHANGE THE WASTE MANAGEMENT OPTIONS. STATE AND LOCAL DISPOSAL REGULATIONS MAY DIFFER FROM FEDERAL DISPOSAL REGULATIONS. DISPOSE OF CONTAINER AND UNUSED CONTENTS

IN ACCORDANCE WITH FEDERAL, STATE
AND LOCAL REQUIREMENTS.

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

Transport Information:NOT REGULATED.

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

SARA Title III Information:ETHYLENE GLYCOL, CAS # 107-21-1: SARA 302
RQ-NO, TPQ-NO; SARA 313 LISTED-YES, CHEMICAL CATG-NO.

Federal Regulatory Information:ETHYLENE GLYCOL, CAS # 107-21-1:
RCRA/CERCLA RQ-5000 LBS. TSCA 261.33-NO, 8(D)-NO.

State Regulat

ory Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

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