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MATERIAL
SAFETY
DATA
SHEET

Cat. No.:00235

March 20, 1991

SECTION I IDENTIFICATION

Product Name: Propylene oxide, EM Grade
Chemical Name: Propene oxide
Synonym: 1,2-Epoxypropane
Formula: C3 H6 O

CASRN:75-56-93

SECTION II HAZARDOUS INGREDIENTS DATA

Threshold Limit Values

Hazardous Components:	CASRN	%	OSHA-TWA		OSHA-STEL	
			ppm	mg/m3	ppm	mg/m3
Propylene oxide	75-56-9	100	100	240	20	5

This chemical is subject to the reporting requirement of SARA Title III section 313, and of 40 CFR 372.

SECTION III PHYSICAL DATA

Boiling Point : 93.0F/33.9C % Volatile by Volume :100 @ 760 mm Hg

Vapor Pressure : 442 mm Hg Evaporation Rate : 33.7 (Butyl Acetate = 1)

Vapor Density : 2.0 Specific Gravity : 0.826 @ 20C

Solubility in Water : 40.5% @ 20C Melting Point : -111.9 C

Appearance and Odor : colorless liquid and vapor at normal temperature and pressure; ethereal odor.

SECTION IV EXPLOSION AND FIRE HAZARD DATA

Flash Point: -35F/-37.2C Flammable Limits:
 Test Mode: TOC LEL: 2.1% UEL:38.5%

Extinguishing Media:carbon dioxide, dry chemical, alcohol foam
 Special Fire Fighting Procedures: Firefighters must wear self-contained breathing apparatus and fully protective equipment.
 Unusual Fire and Explosion Hazards:Material is highly volatile and readily gives off vapors which may travel along the ground or be moved by ventilation and ignited by pilot lights, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from materia handling point.

POLYSCIENCES, INC. HAZARD CODE:CHM7g

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 N/A = Not Applicable; NE = Not Established; N/D = No Data

SECTION V HEALTH HAZARD

Route(s) of Entry: Inhalation: yes Skin:yes Ingestion: yes
ATCDS#: T22975000 Carcinogenicity: yes (IARC and NTP)

Health Hazards (acute):

Eye- can cause severe irritation, rednes, tearing, blurred vision.

Skin- can can irritation. Burns can result from prolonged contact.

Breathing- Excessive inhalation of vapors can cause nasal or respiratory irritation, central nervous system effects including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness, an even death.

Swallowing- can cause gastrointestinal irritation, nausea, vomiting, and diarrhea. Aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.

Health Hazards (chronic): Propylene oxide causes cancer in lab animals.

Medical Conditions Generally Aggravated by Exposure: NE

Emergency and First Aid Procedures:

Skin Contact: Wash affected area with copious amounts of water. Remove contaminated clothing and lauder before reuse.

Eye Contact : Flush eyes with water for at least 15 minutes, lifting upper and lower lid occasionally. Get medical attention.

Inhalation : Remove to fresh air. Give oxygen or artificial respiration, as needed. Keep person warm, quiet, and get medical attention.

Ingestion : Do not induce vomiting. Keep person warm, quiet, and get medical attention. Aspiration of maaterial into the lungs due to vomiting can cause chemical pneumonitis, which can be fatal.

Seek medical treatment if discomfort persists.

SECTION VI REACTIVITY DATA

Stability:stable Conditions to Avoid:high temperature

Incompatability: strong alkalis, strong mineral acids, copper, brass

Hazardous Decomposition Products: carbon oxides

Hazardous Polymerization: will occur

Conditions to Avoid:high temperature, free radical sources, peroxides

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Released or Spilled: Wear self-contained breathing apparatus, rubber boots and gloves. Eliminate all source of ignition such as flames (including pilot ligts), and electric sparks. Absorb liquid on paper, vermiculite, floor absorbent, or other absorbent material and transfer to hood. Allow volatile portion to evaporate in hood. Allow sufficient time for vapors to completely clear hood duct work. Destroy large spills or unused material by incineration in accordance with applicable regulations.

Waste Disposal Method: Dispose of in compliance with all local, state, and Federal regulations, or contact an approved/licensed disposal agency

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection:OSHA/MHSA approved respirator

Ventilation: mechanical ventilation to maintain exposure below TLV

Protective Gloves:polyethylene

Eye Protection:splash goggles

Other Protective Equipment: safety shower and eye bath

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storage: Store material at room temperature. Keep storage container tightly closed.