Order No. 69276

POLYSCIENCES, INC. MATERIAL Cat. No. 100235
300 VALLEY ROAD SAFETY
WARRINGTON, PA. 18976 DATA
915343-6464 SHEET
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: [75-55-9]

SECTION II HAZARDOUS INGREDIENTS DATA
Threshold Limit Values

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CASRN</th>
<th>% ppm</th>
<th>mg/m3</th>
<th>OSHA-TWA</th>
<th>OSHA-STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene oxide</td>
<td>75-55-9</td>
<td>100</td>
<td>100</td>
<td>5</td>
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</tbody>
</table>

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 : 93.0°F/33.9°C |
Temperature : 100 °C

Flash 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: -35°F/-37.2°C |
Flammable Limits: 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.

Exposure 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 material 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

CAS #: T2975000  Carcinogenicity: yes (IARC and NTP)

Toxic Hazards (acute):
Eye - can cause severe irritation, redness, tearing, blurred vision.
Skin - can cause 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: None

Emergency and First Aid Procedures:
Skin Contact: Wash affected area with copious amounts of water. Remove contaminated clothing and launder 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: Place material into water and wash out stomach with large amounts of water. Do not induce vomiting. Keep person warm, quiet, and get medical attention. Aspiration of material 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
Incompatibility: strong alkalies, 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 lights), and electrical 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.

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/MSHA 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.)