



MATERIAL SAFETY DATA SHEET
PRO-TEC LOW TEMPERATURE GRADE SHORING FLUID

1. COMPOSITION/INFORMATION ON INGREDIENTS

<u>CAS #</u>	<u>Chemical Name</u>	<u>Percent</u>
57-55-6	PROPYLENE GLYCOL	100%

2. HAZARDS IDENTIFICATION

EYE CONTACT:

May cause mild eye irritation. Symptoms include stinging, tearing, and redness.

SKIN CONTACT:

May cause mild skin irritation. Symptoms may include redness and burning of skin. Although rare, skin contact with propylene glycol may cause allergic skin reaction (delayed skin rash which may be followed by blistering, scaling and other skin effects). Passage of this material into the body through the skin is possible, but it is unlikely that this would result in harmful effects during safe handling and use.

SWALLOWING:

Swallowing this material is not likely to be harmful.

INHALATION:

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this material is not likely to be harmful.

SYMPTOMS OF EXPOSURE:

No Data

TARGET ORGAN EFFECTS:

Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals: Kidney damage.

DEVELOPMENTAL INFORMATION:

No Data

CANCER INFORMATION

This material is not expected to cause cancer in humans since it did not cause cancer in laboratory animals. This material is not listed as a carcinogen by the International Agency for Research on Cancer, the National Toxicology Program, or the Occupational Safety and Health Administration.



OTHER HEALTH EFFECTS:
No Data

PRIMARY ROUTE (S) OF ENTRY:
Skin contact, Eye Contact.

3. FIRST AID MEASURES

EYES: If symptoms develop, move individual away from exposure and into fresh air. Flush eyes gently with water while holding eyelids apart. If symptoms persist or there is any visual difficulty, seek medical attention.

SKIN: Remove contaminated clothing. Wash with soap and water. If symptoms persist, seek medical attention. Launder clothing before reuse.

INGESTION: First aid is not normally required. If symptoms develop, seek medical attention.

INHALATION: First aid is not normally required. If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention.

NOTE TO PHYSICIANS: Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: Kidney.

4. FIRE FIGHTING MEASURES

FLASH POINT: 211°F.

EXPLOSIVE LIMIT: LOWER: 2.6% UPPER: 12.6%

AUTO-IGNITION TEMPERATURE: 700°F

HAZARDOUS PRODUCT OF COMBUSTION:
May form: Carbon dioxide and carbon monoxide

FIRE AND EXPLOSION HAZARDS:
No special fire hazards are known to be associated with this product.

EXTINGUISHING MEDIA:
Alcohol foam, water fog, carbon dioxide, dry chemical

FIRE FIGHTING INSTRUCTIONS:
Water or foam may cause frothing which can be violent and possibly endanger the life of the firefighter. Water may be used to keep fire-exposed containers cool until fire is out. Wear a self-contained breathing apparatus with a full-face piece operated in the positive pressure demand mode with appropriate turnout gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS

NFPA Rating
Health – 0, Flammability – 1, Reactivity -0



5. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS:

Absorb liquid on vermiculite, floor absorbent or other absorbent Material

LARGE SPILLS:

Persons not wearing protective equipment should be excluded from area of spill until clean up has been completed. Stop spill at source, dike area of the spill to prevent spreading, pump liquid to salvage tank. Remaining liquid may be taken up on sand, clay, earth, floor absorbent, or other absorbent material and shoveled into containers. Per good environmental management practices, prevent run-off to seer, streams and other bodies of water. Stop spill at the source. Cover sewer grates and dike the spill. Absorb spilled material on to absorbents. Shovel materials into container. Close container tightly and dispose of properly.

6. HANDLING AND STORAGE

HANDLING:

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed. **WARNING.** Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperatures and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without the presence of obvious ignition sources. Published "auto-ignition" or "ignition" temperature values cannot be treated as safe operation temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions.

7. EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE PROTECTION:

Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other types of safety glasses. Consult your safety representative.

SKIN PROTECTION:

Wear resistant gloves (consult your safety equipment supplier). To prevent repeated or prolonged skin contact, wear impervious clothing and boots.

RESPIRATORY PROTECTION:

If overexposure has been determined or documented, a NIOSH/MSHA jointly approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators under specified conditions. (See your safety equipment supplier.) Engineering or administrative controls should be implemented to reduce exposure.

ENGINEERING CONTROLS:

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below level of overexposure (from known, suspected or apparent adverse effects.)

EXPOSURE GUIDELINES:

Component: PROPYLENE GLYCOL (57-55-6), No exposure limits established.



8. PHYSICAL AND CHEMICAL PROPERTIES

BOILING/MELTING POINT:
365°F - 374°F @ 760 mmHg

SPECIFIC GRAVITY (H₂O = 1):
1.037 @ 68°F

VAPOR DENSITY (AIR = 1):
2.6

VAPOR PRESSURE:
.220 mmHg @ 68°F

PERCENT VOLATILE BY VOLUME (%):
100%

LIQUID DENSITY:
8.640 lbs/gal @ 68°F

EVAPORATION:
< .01 (N-BUTYL ACETATE)

SOLUBILITY IN WATER:
Complete

PH:
ND

APPEARANCE AND ODOR:
Clear, viscous, liquid, water-white, slight/odorless

VOLATILE ORGANIC COMPOUND (VOC):
100%
8.64 Lbs/gal

VISCOSITY
46.0 cps

FREEZING POINT
< -76°F

MOLECULAR WEIGHT
76.1

OCTANOL/WATER PARTITION COEFFICIENT
< 1.000

BULK DENSITY
1.160 lbs/ft³



9. STABILITY AND REACTIVITY

STABILITY:
Stable.

HAZARDOUS POLYMERIZATION:
Will not occur

INCOMPATIBILITY:
Strong acids, strong bases, strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:
May form: carbon dioxide and carbon monoxide.

10. TOXICOLOGICAL INFORMATION

NO DATA AVAILABLE

11. ECOLOGICAL INFORMATION

NO DATA AVAILABLE

12. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Dispose of in accordance with all applicable local, state and federal regulations.

13. TRANSPORT INFORMATION

DOT INFORMATION – 49 CFR 172.101
DOT DESCRIPTION:
NON-REGULATED BY D.O.T.

CONTAINER/MODE
55 Gal. Drum/truck package

NOS COMPONENT:
NONE

RQ (Reportable Quantity) – 49 CFR 172.101



14. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (Toxic Substances Control Act) Status

TSCA (United States) the intentional ingredients of this product are listed.

CERCLA R.Q. – 40 CFR 302.4 (a)

SARA 302 COMPONENTS – 40 CFR 355 Appendix A

SECTION 311/312 Hazard Class – 40 CFR 370.2
Delayed

SARA 313 Components – 40 CFR 372.65
None

OSHA PROCESS SAFETY MANAGEMENT 29 CFR 1910
None Listed

EPA ACCIDENTAL RELEASE PREVENTION 40 CFR 68
None Listed

INTERNATIONAL REGULATIONS

INVENTORY STATUS

ACQIN (AUSTRALIA) The intentional ingredients of this product are listed.

DSL (CANADA) The intentional ingredients of this product are listed.

ECL (SOUTH KOREA) The intentional ingredients of this product are listed.

EINECS (EUROPE) The intentional ingredients of this product are listed.

ENCS (JAPAN) The intentional ingredients of this product are listed.

STATE REGULATIONS

California Proposition 65
None

Pennsylvania RTK Label Information
1,2 PROPANEDIOL

15. OTHER INFORMATION

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

NA= NOT APPLICABLE, ND= NOT DETERMINED, < = LESS THAN, > = GREATER THAN