

MATERIAL SAFETY DATA SHEET

Total Solutions
P.O. Box 240014
Milwaukee, WI 53224



GENERAL INFORMATION NUMBER: (414) 354-6417
CHEMTREC: (800) 424-9300

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I - Product Identification

Liquid Ice Melt

PRODUCT CODE: 0275

CHEMICAL FORMULATION: Alcohol based de-icing agent.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 1

FLAMMABILITY: 3

REACTIVITY: 0

HAZARD RATING: 4 - Extreme;

3 - High;

2 - Moderate;

1 - Slight;

0 - Insignificant

II - Hazardous Ingredients

Values reported as TWA unless noted.

<u>SUBSTANCE</u>	<u>APPROX</u> %	<u>OSHA</u> <u>PEL</u>	<u>ACGIH</u> <u>TLV</u>	<u>EPA 40 CFR:</u>			<u>CAS #</u>
				<u>302</u>	<u>355</u>	<u>372</u>	
Ethylene glycol	30.0-40.0	50 ppm	50 ppm	Y	N	Y	107-21-1
Methanol	15.0-25.0	200 ppm	200 ppm	Y	N	Y	67-56-1

Key: PEL: Permissible Exposure Limit TLV: Threshold Limit Value C: Ceiling level STEL: Short Term Exposure Limit
N/A: Not Applicable N/D: Not Determined N/E: Not Established Y: Yes N: No
302: CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).
355: SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).
372: SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

III - Physical Data

BOILING POINT (°F): N/D

SPECIFIC GRAVITY (WATER = 1): 0.99

VAPOR PRESSURE (mm Hg): N/D

VOC CONTENT (% by weight): 15.0-25.0

VAPOR DENSITY (AIR = 1): N/D

EVAPORATION RATE (WATER = 1): N/D

SOLUBILITY IN WATER: Soluble

pH: N/A

APPEARANCE AND ODOR: Clear to slight hazy, light green liquid; glycol/alcohol odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): 96

(TEST METHOD): Closed cup

FLAMMABLE LIMITS IN AIR (VOLUME %) UPPER: N/D LOWER: N/D

EXTINGUISHING MEDIA: Water, foam, carbon dioxide, dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should be equipped with full protective gear including self-contained breathing apparatus. Cool fire exposed containers with water fog.

UNUSUAL FIRE AND EXPLOSION HAZARD: Vapors may travel considerable distance to a source of ignition and flash back.

V - Reactivity Data

STABILITY: Stable**INCOMPATIBILITY:** Strong oxidizers.**CONDITIONS TO AVOID:** Heat, sparks or open flame.**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce oxides of carbon.**HAZARDOUS POLYMERIZATION:** Will not occur.**CONDITIONS TO AVOID:** None

VI - Health Hazard Data

ROUTES OF ENTRY INHALATION: X EYE CONTACT: X SKIN CONTACT: X INGESTION: X**INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS:** None.**EFFECTS OF OVEREXPOSURE****IF IN EYES:** Mild irritation, redness, tearing, blurred vision. May injure eye tissue if not removed promptly.**IF ON SKIN:** Redness, dryness, irritation, defatting with prolonged or repeated exposure.**IF SWALLOWED:** Gastrointestinal irritation, dizziness, drowsiness, drunkenness, weakness, CNS depression. May be harmful or fatal if swallowed. Small amounts of the liquid aspirated into the respiratory system during ingestion, or from vomiting, may cause bronchiopneumonia or pulmonary edema.**IF INHALED:** Respiratory tract irritation, nausea, vomiting, headache and dizziness.**NOTE TO PHYSICIAN:** Ethylene glycol can cause pulmonary edema. It is also toxic to kidneys and causes metabolic acidosis.**EMERGENCY AND FIRST AID PROCEDURES****IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.**IF ON SKIN:** Wash with soap and water. Remove contaminated clothing and launder before reuse. If irritation persists, obtain medical attention.**IF SWALLOWED:** Contact physician or poison control center immediately. Give affected person one to two glasses of water. Do not induce vomiting unless told to do so by a physician or poison control center. Never give anything by mouth to an unconscious person.**IF INHALED:** Remove person to fresh air. If breathing has stopped administer artificial respiration. If breathing is difficult, administer oxygen.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area and remove all source of ignition. Soak up spilled material with inert absorbent material and place in a properly labeled container for proper disposal.**WASTE DISPOSAL METHOD:** Consult local environmental authorities.

VIII - Special Protection Information

RESPIRATORY PROTECTION: Use with adequate ventilation. If recommended Exposure Limits are exceeded wear a NIOSH approved respirator, following manufacturer's recommendations.**VENTILATION****LOCAL:** Recommended**MECHANICAL:** Not required**PROTECTIVE GLOVES:** Chemical resistant.**EYE PROTECTION:** Safety glasses or chemical goggles**OTHER PROTECTIVE EQUIPMENT:** Eye wash station.**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry place away from heat or open flame. Keep container tightly closed when not in use.**OTHER PRECAUTIONS:** Keep out of reach of children.

IX - Transportation Information (ground transportation only)

DOT PROPER SHIPPING NAME: Methanol solution.**DOT CLASS:** 3**DOT ID NUMBER:** UN1230**DOT PACKING GROUP:** II

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

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