

MATERIAL SAFETY DATA SHEET

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



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

REVISION DATE: August 26, 2005
DATE OF ISSUE: August 31, 2005

I - Product Identification

Windshield De-Icer

PRODUCT CODE: 8209

CHEMICAL FORMULATION: Pressurized alcohol based deicer.

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.

SUBSTANCE	APPROX	OSHA	ACGIH	EPA 40 CFR:			CAS #
	%	PEL	TLV	302	355	372	
Methanol	> 90.0	200 ppm	200 ppm	Y	N	Y	67-56-1
Carbon Dioxide	1.00-5.00	10,000 ppm	5000 ppm	N	N	N	124-38-9

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): 147 SPECIFIC GRAVITY (WATER = 1): 0.792
VAPOR PRESSURE (mm Hg): 96 at 20°C VOC CONTENT (% by weight): 90.0-95.0
VAPOR DENSITY (AIR = 1): 1.1 EVAPORATION RATE (WATER = 1): > 1.0
SOLUBILITY IN WATER: Miscible pH: N/A
APPEARANCE AND ODOR: Clear, colorless liquid; alcohol odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): 52 (TEST METHOD): Closed cup NFPA 30B Rating: 3
FLAMMABLE LIMITS IN AIR (VOLUME %) UPPER: 6 LOWER: 36.5
EXTINGUISHING MEDIA: Water spray, foam, carbon dioxide, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES: Cool fire exposed containers with water fog. Firefighters should be equipped with full protective gear including self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARD: Contents under pressure. Exposure to temperatures above 120° F may cause bursting.

V - Reactivity Data

STABILITY: Stable

INCOMPATIBILITY: Strong oxidizers.

CONDITIONS TO AVOID: Excess heat and 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:**

INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS: None

EFFECTS OF OVEREXPOSURE

IF IN EYES: Moderate to severe irritation, blurred vision and possible tissue damage to eyes.

IF ON SKIN: Moderate irritation, defatting and dermatitis with prolonged or repeated exposure.

IF SWALLOWED: May be harmful or fatal if swallowed. Gastrointestinal irritation, nausea, vomiting.

IF INHALED: Drowsiness, lightheadedness, weakness, headache.

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: Remove contaminated clothing and wash with soap and water for 15 minutes. If irritation persists, obtain medical attention.

IF SWALLOWED: Contact physician or poison control center immediately. Induce vomiting, then give 2 teaspoons of baking soda in a glass of water. Never give anything to an unconscious person. Obtain medical attention.

IF INHALED: Remove person to fresh air. If breathing has stopped, administer artificial respiration. Obtain medical attention.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area and extinguish all sources of ignition. Soak up material with inert absorbent material and place in a labeled closed container for disposal.

WASTE DISPOSAL METHOD: Consult local environmental authorities. Dispose of cans in non-incinerated trash only.

VIII - Special Protection Information

RESPIRATORY PROTECTION: Use with adequate ventilation. Do not breathe vapors or mists. 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 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.

OTHER PRECAUTIONS: Keep out of reach of children. Do not puncture or incinerate container.

IX - Transportation Information (ground transportation only)

DOT PROPER SHIPPING NAME: Consumer Commodity

DOT CLASS: ORM-D

DOT ID NUMBER: None

DOT PACKING GROUP: None

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.

REVISION DATE: August 26, 2005

Prepared by: Technical Dept.

DATE OF ISSUE: August 31, 2005

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Total Solutions assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material such vendees or users assume all risks associated with the use of this material.