

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsens De-Icer
MSDS NO. 3282
Revision Date: 12/24/2002

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Johnsens De-Icer
Chemical Family: ALCOHOL
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300

Supplier: Technical Chemical Company, P.O. Box 139, Cleburne, Texas 76033

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient/CAS No.	wt. %	OSHA PEL TWA	OSHA PEL Ceiling Limits	ACGIH TLV TWA	ACGIH TLV STEL
Methyl Alcohol 67-56-1	55-65	200 ppm	Not Known	200 ppm	250 ppm
Ethylene Glycol 107-21-1	15-25	50 ppm	50 ppm	39 ppm	None Established
Propane 74-98-6	5-15	1000 ppm	Not Known	2500 ppm	Not Known
Butane 106-97-8	0-10	800 ppm	Not Known	800 ppm	Not Known
Isopropyl Alcohol 67-63-0	0-10	400 ppm	Not Known	400 ppm	500 ppm
Iso-Butane 75-28-5	0-10	None Established	None Established	None Established	None Established

3. HAZARDS IDENTIFICATION

Emergency Overview: Danger: Extremely flammable. Danger: Poison. Content under pressure. This material is an eye and skin irritant. Ingestion of even small amounts of methyl alcohol can cause blindness and death. Possible redness and defatting may result from prolonged skin exposure to this material. Ingestion can cause irreversible nervous system damage and death. Absorption through skin increases exposure. Gross inhalation overexposure may cause: respiratory track irritation, kidney damage, blood, liver damage, lung damage and central nervous system depression. Repeated exposure over TLV can cause blindness.

4. FIRST AID MEASURES

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.

Ingestion: Induce vomiting promptly using physician's instructions or by having patient stick finger down throat. After vomiting has been induced, give two teaspoonsful of baking soda in a glass of water. Seek immediate medical attention. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Skin Contact: Wash with soap and water for 15 minutes. If irritation persists or signs of toxicity occur, seek medical attention. Remove contaminated clothing and laundry before reuse.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): -200 F (Propellant)

Flash Point Method: TAG Closed Cup

Flammable Limits in Air - Lower (%): 1.1%

Flammable Limits in Air - Upper (%): Not Determined

Autoignition Temperature °F(°C): 650 F (Lowest Component)

Extinguishing Media: Carbon dioxide. Use water spray to keep containers cool that are exposed to heat or flames. Foam.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing. Vapor may cause flash fire. Warning!! Contents under pressure. Container may rupture under fire conditions. Decomposition may occur.

Hazardous Combustion Products: Carbon Dioxide. Carbon Monoxide.

Aerosol Comments: NFPA Level 2 Aerosol

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact.
Spill Procedures: Contain any liquid from leaking containers. Avoid all sources of ignition; heat, sparks and open flames. Do not puncture or incinerate container. Contents under pressure. Wear proper protective equipment as specified in the protective equipment section. Remove sources of ignition. Leaking containers should be removed to an isolated, well-ventilated area and transferred to other suitable containers. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal.
Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters. Keep out of lakes, ponds or streams.

7. HANDLING AND STORAGE

Handling and Storage: Caution: Contents under pressure. Keep away from heat and open flame. Use only in a well ventilated area. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Do not puncture, incinerate or store above 120 F. Exposure to high temperatures may cause bursting. DO NOT store in the passenger compartment of an automobile.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use in a well ventilated area. Local exhaust ventilation as necessary to maintain exposures to within applicable limits.
Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.
Skin Protection: Avoid skin contact. Wear protective clothing and gloves.
Respiratory Protection: Do not breath mist or vapor. Use in a well ventilated area. Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless to light yellow liquid	pH Value:	Not Determined
Odor:	SLIGHT ALCOHOL	Vapor Density (Air=1):	1.1 (liquid)
Vapor Pressure:	63.9 mm of Hg @ 20C (liquid)	Melting/Freezing Point:	Not Determined.
Boiling Point (°F):	160-389 F (liquid)	Bulk Density at 20°C:	7.239 lb/gal
Solubility in Water:	Solubility in Water:	Evaporation Rate:	Not Determined
Molecular Weight:	Mixture	Specific Gravity (H2O=1):	.869 @ 60 F (liquid)
Viscosity:	Not Determined.	Decomposition Temperature:	Not Determined
VOC Content(%):	Not determined.		

10. STABILITY AND REACTIVITY

Chemical Stability: STABLE.
Conditions to Avoid: Keep away from heat, sparks and flame. Avoid any source of ignition. Do not expose to heat or store at temperatures above 120 F.
Materials to Avoid: Contact with oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide. Carbon dioxide. and other asphxiants.
Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Ingredient/CAS No.	wt. %	Route	Species	Dose
Methyl Alcohol 67-56-1	55-65	Inhalation	Rats	LC50 64,000 ppm
Ethylene Glycol 107-21-1	15-25	Inhalation	Rats	LC50 10876 mg/kg
Propane 74-98-6	5-15	NA	NA	Not known.
Butane 106-97-8	0-10	Inhalation	Rats	LC50, 658 gm/m3/4H
Isopropyl Alcohol 67-63-0	0-10	Inhalation	Rats	LC50 16,000 ppm
Iso-Butane 75-28-5	0-10	Inhalation	Rats	LC50 57 pph/15M

Carcinogenicity:

Ingredient/CAS No.	wt. %	IARC	NTP	OSHA
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Methyl Alcohol 67-56-1	55-65	Not Listed		Not Listed	Not Listed
Ethylene Glycol 107-21-1	15-25	Not Listed		Not Listed	Not Listed
Propane 74-98-6	5-15	Not Listed		Not Listed	Not Listed
Butane 106-97-8	0-10	Not Listed		Not Listed	Not Listed
Isopropyl Alcohol 67-63-0	0-10	Not Listed		Not Listed	Not Listed
Iso-Butane 75-28-5	0-10	Not Listed		Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

13. DISPOSAL CONSIDERATION

Waste Classification: Not determined.

Waste Management: Not determined.

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT:

Proper Shipping Name: ORM-D CONSUMER COMMODITY
Hazard Class: ORM-D
UN/NA Number: Not Applicable
DOT Packing Group: Not Applicable

IMDG:

Proper Shipping Name: Aerosols (Limited Quantity)
Hazard Class: 2.1
Hazard Subclass: Not determined.
UN No.: UN1950
Packing Group: PG II
Marine Pollutant: No

15. REGULATORY INFORMATION

US Federal Regulations:

Ingredient/CAS No.	wt. %	SARA 313	SARA 302	RQ	TPQ
Methyl Alcohol 67-56-1	55-65	Listed	Not Listed	NA	NA
Ethylene Glycol 107-21-1	15-25	Listed	Not Listed	5000 lbs	NA
Propane 74-98-6	5-15	Not Listed	Not Listed	NA	NA
Butane 106-97-8	0-10	Not Listed	Not Listed	NA	NA
Isopropyl Alcohol 67-63-0	0-10	Listed	Not Listed	NA	NA
Iso-Butane 75-28-5	0-10	Not Listed	Not Listed	NA	NA

Hazardous per OSHA 29 CFR 1910.1200

Trade Name: Johnsens De-Icer **MSDS NO.** 3282
SARA 311/312 Hazard Categories: Not Determined.

State Regulations:

Ingredient/CAS No.	wt. %	California Prop. 65 Cancer list	California Prop. 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male
Methyl Alcohol 67-56-1	55-65	Not Listed	Not Listed	Not Listed	Not Listed
Ethylene Glycol 107-21-1	15-25	Not Listed	Not Listed	Not Listed	Not Listed
Propane 74-98-6	5-15	Not Listed	Not Listed	Not Listed	Not Listed
Butane 106-97-8	0-10	Not Listed	Not Listed	Not Listed	Not Listed
Isopropyl Alcohol 67-63-0	0-10	Not Listed	Not Listed	Not Listed	Not Listed
Iso-Butane 75-28-5	0-10	Not Listed	Not Listed	Not Listed	Not Listed

U.S. TSCA: The components of this product are listed on the TSCA Inventory.

16. OTHER INFORMATION

General Notes: Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

Disclaimer:

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