MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product number	758-001
Product name	**Fast-Acting Windshield De-Icer**
Effective date	21-Sep-2009
Company information	Claire Manufacturing Co. 500 Vista Ave. Addison, IL 60101 United States
Company phone	General Assistance 630-543-7600
Emergency telephone US	800-424-9300
Emergency telephone outside US	703-527-3887
Version #	06
Supersedes date	06-May-2009

2. Hazards Identification

Emergency overview

FLAMMABLE
VAPOR HARMFUL.
CONTENTS UNDER PRESSURE. Aerosol. Will be easily ignited by heat, spark or flames.
Harmful in contact with eyes. Prolonged exposure may cause chronic effects. POISON
Poison- may be fatal or cause blindness if swallowed.

Potential health effects

Routes of exposure	Ingestion. Skin contact. Eye contact.
Eyes	Contact may irritate or burn eyes. Eye contact may result in corneal injury.
Skin	Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).
Inhalation	Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Prolonged inhalation may be harmful.
Ingestion	Exposure by ingestion of an aerosol is unlikely. May cause delayed lung damage. Components of the product may be absorbed into the body by ingestion.
Target organs	Central nervous system. Lungs.
Chronic effects	Conjunctiva. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion, and blurred vision) and/or damage. May cause delayed lung damage.
Signs and symptoms	Discomfort in the chest. Corneal damage. Narcosis. Conjunctivitis. Defatting of the skin. Irritation.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Methanol	67-56-1	60 - 70
Isopropyl Alcohol	67-63-0	8 - 10
Ethylene Glycol	107-21-1	3 - 5
Propane	74-98-6	1 - 3
Carbon Dioxide	124-38-9	1 - 3
Non-hazardous and other components below reportable levels		10 - 20

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Skin contact	Immediately take off all contaminated clothing. Wash off with warm water and soap. Get medical attention if irritation develops or persists.

Inhalation Move to fresh air. If symptoms persist, get medical attention.

Ingestion If material is ingested, immediately contact a poison control center. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. Fire Fighting Measures

Flammable properties Vapor or gas may spread to distant ignition sources and flash back. Runoff to sewer may cause fire or explosion hazard.

Extinguishing media

Suitable extinguishing media Water. Water spray. Water fog. Foam. Dry chemical. Carbon dioxide (CO2).

Protection of firefighters

Protective equipment and precautions for firefighters In the event of fire and/or explosion do not breathe fumes. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Containers should be cooled with water to prevent vapor pressure build up. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Cool containers with flooding quantities of water until well after fire is out.

6. Accidental Release Measures

Methods for containment Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up Should not be released into the environment. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly. After removal flush contaminated area thoroughly with water.

7. Handling and Storage

Handling Pressurized container: Do not pierce or burn, even after use. Do not handle or store near an open flame, heat or other sources of ignition. Use only in area provided with appropriate exhaust ventilation. Do not use if spray button is missing or defective. Do not get this material in contact with eyes. Do not get this material in contact with skin. Avoid prolonged exposure.

Storage Level 1 Aerosol.
Contents under pressure. Do not puncture, incinerate or crush. The pressure in sealed containers can increase under the influence of heat. Keep away from heat, sparks, and flame. Avoid exposure to long periods of sunlight. Store in cool place. Keep in an area equipped with sprinklers. Keep out of the reach of children. Do not store, incinerate, or heat this material above 120 degrees Fahrenheit.

8. Exposure Controls / Personal Protection

Exposure limits

ACGIH

Components	CAS #	TWA	STEL	Ceiling
Methanol	67-56-1	200 ppm	250 ppm	Not established
Isopropyl Alcohol	67-63-0	200 ppm	400 ppm	Not established
Ethylene Glycol	107-21-1	Not established	Not established	100 mg/m3
Propane	74-98-6	1000 ppm	Not established	Not established
Carbon Dioxide	124-38-9	5000 ppm	30000 ppm	Not established

OSHA Components	CAS #	TWA	STEL	Ceiling
Methanol	67-56-1	200 ppm	Not established	Not established
Isopropyl Alcohol	67-63-0	400 ppm	Not established	Not established
Propane	74-98-6	1000 ppm	Not established	Not established
Carbon Dioxide	124-38-9	5000 ppm	Not established	Not established

Personal protective equipment

Eye / face protection Wear chemical goggles.

Skin protection Wear appropriate chemical resistant gloves. Wear appropriate chemical resistant clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

9. Physical & Chemical Properties

Appearance Compressed liquefied gas.

Boiling point 168.8 °F (76.1 °C) estimated

Color Clear.

Flammability (HOC) 16.9069 kJ/g estimated

Flash back No

Flash point -156 °F (-104.4 °C) Propellant

Form Aerosol.

Odor Alcoholic.

pH 9.5 - 10.5

Physical state Liquid.

Pressure 95 - 105 psig @ 70F

Solubility Partially

Specific gravity 0.837 estimated

10. Chemical Stability & Reactivity Information

Chemical stability Risk of ignition.

Conditions to avoid Heat, flames and sparks.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological Information

Acute effects Acute LD50: 14212 mg/kg estimated, Rat, Dermal

Sensitization Not expected to be hazardous by OSHA criteria.

Teratogenicity Not expected to be hazardous by OSHA criteria.

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

LC50 18645 mg/L estimated, Fish, 96.00 Hours,
IC50 10061 mg/L estimated, Algae, 72.00 Hours,

13. Disposal Considerations

Waste codes D001: Waste Flammable material with a flash point <140 F

Disposal instructions Contents under pressure. Dispose of this material and its container at hazardous or special waste collection point. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Basic shipping requirements:	
Proper shipping name	Consumer commodity
Hazard class	ORM-D
Subsidiary hazard class	None
Additional information:	
Packaging exceptions	156, 306
Packaging non bulk	156, 306
Packaging bulk	None

IMDG

Basic shipping requirements:	
Proper shipping name	AEROSOLS
Hazard class	2.1
Subsidiary hazard class	6.1
UN number	1950
Additional information:	
Packaging exceptions	NOT a LTD QTY
Item	5F
Labels required	2.1, 6.1
Transport Category	2

IATA

Basic shipping requirements:	
Proper shipping name	Aerosols, flammable, containing substances in Division 6.1, Packing Group III
Hazard class	2.1
Subsidiary hazard class	6.1
UN number	1950
Additional information:	
Packaging exceptions	LTD QTY
Labels required	2.1, 6.1

15. Regulatory Information

US federal regulations

OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Ethylene Glycol	107-21-1	1.0 % de minimis concentration
Isopropyl Alcohol	67-63-0	1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)
Methanol	67-56-1	1.0 % de minimis concentration

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical	Yes

CERCLA (Superfund) reportable quantity

Methanol: 5000.0000
Ethylene Glycol: 5000.0000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - Yes Reactivity Hazard - No
Section 302 extremely hazardous substance	No

Section 311 hazardous chemical Yes

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

U.S. - Pennsylvania - RTK (Right to Know) List

Carbon Dioxide	124-38-9	Present
Ethylene Glycol	107-21-1	Environmental hazard
Isopropyl Alcohol	67-63-0	Environmental hazard
Methanol	67-56-1	Environmental hazard
Propane	74-98-6	Present

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings Health: 1*
Flammability: 2
Physical hazard: 0

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

MSDS sections updated This document has undergone significant changes and should be reviewed in its entirety.

Prepared by Regulatory Compliance