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1. Identification

1.1. Product identifier

Product Identity Deicing-Defrosting Fluid, Aerosol

Alternate Names Specification: O-D-190B

LHB Part Number: 0344---000

National Stock Number: 6850-00-835-0484

CAGE Code: 0FTT5

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended useSee Technical Data Sheet.Application MethodSee Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name LHB Industries

8833 Fleischer Place Berkeley, MO 63134

Emergency

24 hour Emergency Telephone No. (800) 633-8253 (PERS)

Customer Service: LHB Industries (314) 423-4333

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Flam. Aerosol 1;H222 Extremely flammable aerosol.

Press. Gas;H280 Contains gas under pressure; may explode if heated.

Flam. Liq. 3;H226 Flammable liquid and vapor.

Acute Tox. 3;H301 Toxic if swallowed.

Acute Tox. 3;H311 Toxic in contact with skin.

Acute Tox. 3;H331 Toxic if inhaled.

STOT SE 1;H370 Causes damage to organs. Specific Target Organs: (Not Available)

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2.2. Label elements



Danger

- H222 Extremely flammable aerosol.
- H226 Flammable liquid and vapor.
- H280 Contains gas under pressure; may explode if heated.
- H301 Toxic if swallowed.
- H311 Toxic in contact with skin.
- H331 Toxic if inhaled.
- H370 Causes damage to organs.
- Pressurized container: May burst if heated.

[Prevention]:

- P210 Keep away from heat / sparks / open flames / hot surfaces No smoking.
- P211 Do not spray on an open flame or other ignition source.
- P233 Keep container tightly closed.
- P240 Ground / bond container and receiving equipment.
- P241 Use explosion-proof electrical / ventilating / light / equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P251 Pressurized container: Do not pierce or burn, even after use.
- P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
- P264 Wash thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves / eye protection / face protection.

[Response]:

- P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.
- P302+352 IF ON SKIN: Wash with plenty of soap and water.
- P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
- P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.
- P307+311 IF exposed: Call a POISON CENTER or doctor / physician.

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P321 Specific treatment (see information on this label).

P330 IF SWALLOWED: Rinse mouth.

P363 Wash contaminated clothing before reuse.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

P410+412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122 °F.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Methanol CAS Number: 0000067-56-1	50 - 75	Flam. Liq. 2;H225 Acute Tox. 3;H331 Acute Tox. 3;H311 Acute Tox. 3;H301 STOT SE 1;H370 (> 10%) STOT SE 2;H371 (3% ~ 10%)	[1][2][3]

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

- [1] Substance classified with a health or environmental hazard.
- [2] Substance with a workplace exposure limit.

Section 4. First aid measures

4.1. Description of first aid measures

General In all cases of doubt, or when symptoms persist, seek medical attention.

Never give anything by mouth to an unconscious person.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give

artificial respiration. If unconscious, place in the recovery position and obtain immediate

medical attention. Give nothing by mouth.

Eyes Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and

seek medical attention.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water or use a

recognized skin cleanser.

^[3] PBT-substance or vPvB-substance.
*The full texts of the phrases are shown in Section 16.

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Ingestion

Induce vomiting of conscious patient immediately by giving two glasses of water and pressing finger down throat. Contact a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Overview

Acute: Severe irritation of the tissue that had contact with the product (skin, eyes, mucous membranes). Drowsiness, fatigue, confusion may be experienced after inhalation or ingestion of the material.

Chronic: Methanol is eliminated slowly from the body. Therefore repeated exposures may build up to toxic levels in body tissues. Animal studies shows long term exposures to Methanol damages the CNS, kidneys or liver, skin disorders, and birth defects.

Symptoms of Over Exposure by Route of Exposure: Methanol may be harmful if swallowed, inhaled, or injected into skin. Methanol can cause skin and eye irritation or damage. Methanol can be very irritating to mucous membranes and the respiratory tract.

Inhalation: Inhalation of Methanol vapors may lead to irritation of the nose and throat. Symptoms of overexposure may include dizziness, coughing, headache, dyspnea, lachrymation, nausea and vomiting. Exposure to high concentrations of this material vapor may cause unconsciousness or death.

Primary Routes of Entry: Inhalation, skin contact, eyes, ingestion.

Target Organs: CNS, eyes, circulatory and respiratory systems.

Contact With Skin or Eyes: Methanol is an eye and skin irritant. Splashes in the eye may cause eye irritation, redness, tearing, and temporary corneal damage or blindness.

Skin Absorption: Methanol is absorbed through the skin and may result in effects similar to inhalation exposure.

Ingestion: Ingestion of one to four ounces of Methanol can cause irreversible damage to the nervous system, blindness, or death. It cannot be made non-poisonous. Aspiration of the material into the lungs can cause chemical pneumonitis.

Injection: Injection of Methanol can lead to redness and irritation of the surrounding tissue. Treat symptomatically. See section 2 for further details.

Inhalation Toxic if inhaled. Causes damage to organs.

Skin Toxic in contact with skin.

Ingestion Toxic if swallowed.

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Section 5. Fire-fighting measures

5.1. Extinguishing media

Carbon Dioxide, Dry Chemical, Foam

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Carbon monoxide

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Do not spray on an open flame or other ignition source.

Keep container tightly closed.

Ground / bond container and receiving equipment.

Use explosion-proof electrical / ventilating / light / equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Pressurized container: Do not pierce or burn, even after use.

Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters

SPECIAL EXPOSURE HAZARDS: Do not expose to temperatures over 120°F. Keep away from heat, sparks and flame. Containers may explode when exposed to extreme heat.

Water may be used to keep fire-exposed containers cool.

Fire fighters should wear full protective clothing, including self-contained breathing equipment.

ERG Guide No. 126

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Avoid inhalation. Use good ventilation. Read entire label before using and follow all label directions.

Remove ignition sources and work with non-sparking tools. Wipe, scrape or soak up contents in an inert material. Pick up spill for recovery or disposal and place in a closed container. Dispose of in accordance with applicable Federal, State & Local regulations.



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Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Keep out of reach of children. Keep away from heat sparks, and open flame. Contents under pressure. Do not puncture, incinerate, or expose to temperatures above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: Strong oxidizing agents and acids.

CATEGORY - NFPA 30B Level 1 Aerosol

Do not store where temperatures may exceed 120°F (48.9°C).

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

Section 8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000067-56-1 Methanol O		OSHA	TWA 200 ppm (260 mg/m3)
		ACGIH	TWA: 200 ppm STEL: 250 ppm Skin
		NIOSH	TWA 200 ppm (260 mg/m3) ST 250 ppm (325 mg/m3) [skin]
		Supplier	No Established Limit

8.2. Exposure controls

Respiratory If personal exposure cannot be controlled to below applicable limits by ventilation, wear a

properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for

protection.

Eyes Wear safety glasses with side shields or goggles.

Skin Impervious clothes to protect skin. Wash promptly when skin becomes contaminated.

Chemical resistant gloves.

Engineering Controls Provide adequate ventilation. Where reasonably practicable this should be achieved by the

use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits

suitable respiratory protection must be worn.

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Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Odor

Ammonia/Alcohol

Odor threshold

PH

Not Measured

Melting point / freezing point

Initial boiling point and boiling range

Flash Point

Not Measured

Not Measured

Not Measured

Not Measured

Slower than ether

Evaporation rate (Ether = 1)Slower than ether **Flammability (solid, gas)**Not Applicable

Upper/lower flammability or explosive limits

Lower Explosive Limit: 1.8

Upper Explosive Limit: 36.5

Vapor pressure (Pa) Not Measured

Vapor Density> 1Specific Gravity0.887Solubility in WaterSoluble

Partition coefficient n-octanol/water (Log Kow)Not MeasuredAuto-ignition temperatureNot MeasuredDecomposition temperatureNot MeasuredViscosity (cSt)Not MeasuredVOC Content52.0% by wt.

Density (lbs/gal) 7.4

9.2. Other informationNo other relevant information.

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

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10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Extreme heat may cause product to decompose, producing acrid smoke and irritating fumes.

10.5. Incompatible materials

Strong oxidizing agents and acids.

10.6. Hazardous decomposition products

Carbon monoxide

Section 11. Toxicological information

Acute toxicity

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Methanol - (67-56-1)	143.00, Human - Category: 3	No data available	No data available	No data available	64,000.00, Rat - Category: NA

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000067-56-1	Methanol	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
	IARC		Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

Classification	Category	Hazard Description
Acute toxicity (oral)	3	Toxic if swallowed.
Acute toxicity (dermal)	3	Toxic in contact with skin.
Acute toxicity (inhalation)	3	Toxic if inhaled.
Skin corrosion/irritation		Not Applicable
Serious eye damage/irritation		Not Applicable
Respiratory sensitization		Not Applicable
Skin sensitization		Not Applicable

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Germ cell mutagenicity		Not Applicable
Carcinogenicity		Not Applicable
Reproductive toxicity		Not Applicable
STOT-single exposure	1	Causes damage to organs.
STOT-repeated exposure		Not Applicable
Aspiration hazard		Not Applicable

Section 12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish,	48 hr EC50 crustacea,	ErC50 algae,	
	mg/l	mg/l	mg/l	
Methanol - (67-56-1)	100.00, Pimephales promelas	10,000.00, Daphnia magna	16.912 (96 hr), Ulva pertusa	

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

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IMO / IMDG (Ocean

Aerosols, Limited Quantity

Sub Class: Not Applicable

Transportation)

UN1950

IMDG: 2.1

All components of this material are either listed or exempt from listing on the TSCA

Not Applicable

ICAO/IATA

Aerosols, Limited

Air Class: 2.1

Not Applicable

UN1950

Quantity

Section 14. Transport information

DOT (Domestic Surface

DOT Hazard Class: 2.1

Transportation)

14.1. UN number UN1950

14.2. UN proper shipping UN1950, Aerosols, Limited

name Quantity, 2.1,

14.3. Transport hazard

class(es)

14.4. Packing group Not Applicable

14.5. Environmental hazards

IMDG Marine Pollutant: No;

14.6. Special precautions for user

No further information

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected

regulations are represented.

Toxic Substance

Control Act (TSCA)

WHMIS 1988 Classification Inventory. A B5 D1B

US EPA Tier II Hazards

Sudden Release of Pressure: Yes

Reactive: No

Fire: Yes

Immediate (Acute): Yes Delayed (Chronic): No

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Methanol

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

Methanol

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Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Section 16. Other information

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.

H371 May cause damage to organs.

IMPORTANT NOTE: This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or any process. Final determination of suitability of any material is the sole responsibility of the user.

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