

Safety Data Sheet

Issue date 18-May-2018

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Revision Number 3

1. IDENTIFICATION

Product identification

Product identifier Drummond™ Sleet De-Icer

Other means of identification 1460569

Recommended use De-Icer

Restrictions on use For industrial use only

Supplier

Corporate Headquarters:
Drummond™, A Lawson Brand
Lawson Products, Inc.
8870 W. Bryn Mawr Ave., Suite 900
Chicago, IL 60631
(866) 837-9908

Canadian Distribution Center:
Lawson Canada
7315 Rapistan Court
Mississauga, ON L5N 5Z4
(800) 323-5922

24 Hour Emergency Phone Number (888) 426-4851 (Prosar)

Website <https://www.lawsonproducts.com>

2. HAZARD(S) IDENTIFICATION

Hazard Classification This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), WHMIS 2015 and GHS Regulations.

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation	Category 4
Flammable aerosols	Category 1

Symbol



Signal word DANGER

Hazard statements

H222 - Extremely flammable aerosol
H302 - Harmful if swallowed
H312 - Harmful in contact with skin
H332 - Harmful if inhaled

Precautionary statements

General	P101 - If medical advice is needed, have product container or label at hand P102 - Keep out of reach of children P103 - Read label before use.
Prevention	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 - Do not spray on an open flame or other ignition source P251 - Pressurized container: Do not pierce or burn, even after use P261 - Avoid breathing dust/fume/gas/mist/vapors/spray P264 - Wash hands thoroughly after handling P280 - Wear protective gloves/protective clothing and eye/face protection P270 - Do not eat, drink or smoke when using this product P271 - Use only outdoors or in a well-ventilated area
Response	
General	P321 - For Specific treatment see section 4 of this sds
Skin	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water P362 - Take off contaminated clothing and wash before reuse
Inhalation	P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Ingestion	P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell P330 - Rinse mouth
Storage	P410 - Protect from sunlight P412 - Do not expose to temperatures exceeding 50 °C/122 °F
Disposal	P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable
Hazard(s) Not Otherwise Classified (HNOC)	None known.
Physical Hazards Not Otherwise Classified (PHNOC)	None known.
Unknown acute toxicity	None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition Mixture.

Chemical name	CAS-No	Weight %
Methanol	67-56-1	50-<100
Isopropyl alcohol	67-63-0	5-10
Propane	74-98-6	1-5
Ethylene glycol	107-21-1	1-5
Carbon Dioxide	124-38-9	1-5
Morpholine	110-91-8	0.1-1

Other components below reportable levels.

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Necessary first-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor if you feel unwell.
Ingestion	Rinse mouth. Get medical attention if symptoms occur. Get medical advice/attention if you feel unwell.
Skin contact	Get medical attention following exposure or if feeling unwell. Wash area thoroughly with soap and water.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If easy to do, remove contact lenses. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Most important symptoms (acute)	Not available.
Most important symptoms (over-exposure)	Direct contact with the eyes may cause temporary irritation.
Indication of any immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.
Unsuitable extinguishing media	None known.
Specific hazards	Contents under pressure. Pressurized container may explode when exposed to heat or flame. Vapors can travel to a source of ignition and flash back.
Special protective equipment for fire-fighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Wear suitable protective equipment. Move containers from fire area if you can do it without risk. Fight fire with normal precautions from a reasonable distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Keep unnecessary people away, isolate hazard area and deny entry. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during cleanup. Do not breathe vapors or spray mist. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8.
Methods and materials for containment and cleaning up	Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc) away from spilled material. Contain the spill to prevent spread to drains, sewers, water supplies, or soil. Prevent product from entering drains. Stop leak if you can without risk. Isolate area until gas has dispersed. For waste disposal, see section 13 of the SDS. Avoid release to the environment.

7. HANDLING AND STORAGE

Precautions for	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is
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safe handling

missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Keep away from open flames, hot surfaces and sources of ignition. Never taste or swallow product. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Beware: Aerosol is pressurized. Protect from sunlight. Do not expose to temperatures exceeding 122 °F (50 °C). Do not puncture, incinerate, or crush.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	OSHA PEL (TWA)	ACGIH OEL (TWA)	NIOSH - TWA
Methanol	200 ppm TWA 260 mg/m ³ TWA	200 ppm TWA Skin	200 ppm TWA 260 mg/m ³ TWA
Isopropyl alcohol	400 ppm TWA 980 mg/m ³ TWA	200 ppm TWA	400 ppm TWA 980 mg/m ³ TWA
Propane	1000 ppm TWA 1800 mg/m ³ TWA	-	1000 ppm TWA 1800 mg/m ³ TWA 1000 ppm TWA 1800 mg/m ³ TWA
Ethylene glycol	-	25 ppm TWA	-
Carbon Dioxide	5000 ppm TWA 9000 mg/m ³ TWA	5000 ppm TWA	5000 ppm TWA 9000 mg/m ³ TWA
Morpholine	20 ppm TWA 70 mg/m ³ TWA	20 ppm TWA Skin	20 ppm TWA 70 mg/m ³ TWA

Appropriate engineering controls

Adequate ventilation should be provided to keep exposure levels below current acceptable exposure limits. As a rule, at least 10 air changes per hour are recommended at the workplace. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Individual protection measures, such as personal protective equipment**Eye protection**

Wear safety glasses with side shields. Goggles.

Skin and body protection

Chemical resistant apron. Wear appropriate thermal protective clothing when necessary.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, a NIOSH/MSHA approved respirator is recommended. Wear a NIOSH approved air purifying organic cartridge respirator.

Hygiene measures

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Regular cleaning of equipment, work area and clothing. Remove and wash contaminated clothing before re-use.

Canadian Province Occupational Exposure Limits

Chemical name	AB	BC	MB	NB	NL	NS	ON	PE	QC	SK
Methanol	200 ppm TWA 262 mg/m ³ TWA	200 ppm TWA	200 ppm TWA	200 ppm TWA 262 mg/m ³ TWA	200 ppm TWA	200 ppm TWA	200 ppm TWA	200 ppm TWA	200 ppm TWA 262 mg/m ³ TWA	200 ppm TWA

Chemical name	AB	BC	MB	NB	NL	NS	ON	PE	QC	SK
Isopropyl alcohol	200 ppm TWA 492 mg/m ³ TWA	200 ppm TWA	200 ppm TWA	400 ppm TWA 983 mg/m ³ TWA	200 ppm TWA	200 ppm TWA	200 ppm TWA	200 ppm TWA	400 ppm TWA 985 mg/m ³ TWA	200 ppm TWA
Propane	1000 ppm TWA 1640 mg/m ³ TWA	1000 ppm TWA	-	1000 ppm TWA 1640 mg/m ³ TWA	-	-	1000 ppm TWA	-	1000 ppm TWA 1800 mg/m ³ TWA 1000 ppm TWA 1640 mg/m ³ TWA	1000 ppm TWA 1000 ppm TWA
Ethylene glycol	-	10 mg/m ³ TWA	25 ppm TWA	-	25 ppm TWA	25 ppm TWA	-	25 ppm TWA	-	-
Carbon Dioxide	5000 ppm TWA 9000 mg/m ³ TWA	5000 ppm TWA	5000 ppm TWA	5000 ppm TWA 9000 mg/m ³ TWA	5000 ppm TWA	5000 ppm TWA	5000 ppm TWA	5000 ppm TWA	5000 ppm TWA 9000 mg/m ³ TWA	5000 ppm TWA
Morpholine	20 ppm TWA 71 mg/m ³ TWA	20 ppm TWA	20 ppm TWA	20 ppm TWA 71 mg/m ³ TWA	20 ppm TWA	20 ppm TWA	20 ppm TWA	20 ppm TWA	20 ppm TWA 71 mg/m ³ TWA	20 ppm TWA

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Gas Aerosol
Color	Clear
Odor	Solvent
Odor threshold	Not available
pH	Not available
Melting point/range °C	Not available
Melting point/range °F	Not available
Boiling point/range °C	100 °C
Boiling point/range °F	212 °F
Flash point °C	-104.4
Flash point °F	-156.0
Flash point method used	based on propellant
Evaporation rate	Not available
Flammability (Solid, Gas)	Not available
Lower explosion limit	5.5 %
Upper explosion limit	33.2 %
Vapor pressure	4481.5922-5860.5436 hPa (20°C)
Vapor density	Not available
Relative density	0.853

Solubility	Not available
Partition coefficient (n-octanol/water)	Not available
Autoignition temperature °C	458.76 °C
Autoignition temperature °F	857.76 °F
Decomposition temperature °C	Not available
Decomposition temperature °F	Not available
Viscosity	Not available

10. STABILITY AND REACTIVITY

Reactivity	The product is stable and not reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Do not store at elevated temperatures.
Incompatible materials	Not available.
Hazardous decomposition products	None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	Dermal. Eyes. Ingestion. Inhalation.
Symptoms	Prolonged skin contact may cause skin irritation. Direct contact with the eyes may cause temporary irritation. Harmful if swallowed. Harmful if inhaled. Harmful in contact with skin.
Delayed and immediate effects as well as chronic effects from short and long-term exposure	Prolonged inhalation may be harmful.

Numerical measures of toxicity

Chemical name	Inhalation LC50:	Dermal LD50:	Oral LD50:
Methanol	22500 ppm Rat	= 6200 mg/kg Rat 15840 mg/kg Rabbit	6200 mg/kg Rat = 15800 mg/kg Rabbit
Isopropyl alcohol	72600 mg/m ³ Rat	= 1870 mg/kg Rat 4059 mg/kg Rabbit	1870 mg/kg Rat = 4059 mg/kg Rabbit
Propane	>800000 ppm Rat	-	-
Ethylene glycol	-	= 4700 mg/kg Rat 10600 mg/kg Rat	4700 mg/kg Rat = 10600 mg/kg Rat = 9530 µL/kg Rabbit
Carbon Dioxide	-	-	-
Morpholine	>8000 ppm Rat	= 1050 mg/kg Rat 310 - 810 mg/kg Rabbit	1050 mg/kg Rat 310 - 810 mg/kg Rabbit

ATEmix (dermal)	1528.87 mg/kg
ATEmix (oral)	1853.6 mg/kg
ATEmix (inhalation-gas)	Not available
ATEmix (inhalation-vapor)	Not available
ATEmix (inhalation-dust/mist)	1.56 mg/l

Carcinogenicity

Chemical name	ACGIH OEL - Carcinogens	IARC	OSHA Carcinogens	NTP
Methanol	-	-	-	-
Isopropyl alcohol	A4	Group 1 Group 3	Present	-
Propane	-	-	-	-
Ethylene glycol	A4	-	-	-
Carbon Dioxide	-	-	-	-
Morpholine	A4	Group 3	-	-

Canadian Province carcinogenicity limits

Chemical name	Alberta - Carcinogen	British Columbia - Carcinogen	Manitoba - Carcinogen	New Brunswick - Carcinogen	Nova Scotia - Carcinogen	Quebec - Carcinogen
Methanol	-	-	-	-	-	-
Isopropyl alcohol	-	-	ACGIH A4	-	ACGIH A4	-
Propane	-	-	-	-	-	-
Ethylene glycol	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-
Carbon Dioxide	-	-	-	-	-	-
Morpholine	-	-	ACGIH A4	ACGIH A4	ACGIH A4	-

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical name	Algae/aquatic plants	Fish LC50
Methanol	-	13500 - 17600mg/L <i>Lepomis macrochirus</i> 96h 18 - 20mL/L <i>Oncorhynchus mykiss</i> 96h 19500 - 20700mg/L <i>Oncorhynchus mykiss</i> 96h = 28200mg/L <i>Pimephales promelas</i> 96h > 100mg/L <i>Pimephales promelas</i> 96h
Isopropyl alcohol	>1000mg/L <i>Desmodesmus subspicatus</i> 96h >1000mg/L <i>Desmodesmus subspicatus</i> 72h	= 11130mg/L <i>Pimephales promelas</i> 96h = 9640mg/L <i>Pimephales promelas</i> 96h > 1400000µg/L <i>Lepomis macrochirus</i> 96h
Propane	-	-
Ethylene glycol	6500 - 13000mg/L <i>Pseudokirchneriella subcapitata</i> 96h	14 - 18mL/L <i>Oncorhynchus mykiss</i> 96h 40000 - 60000mg/L <i>Pimephales promelas</i> 96h = 16000mg/L <i>Poecilia reticulata</i> 96h = 27540mg/L <i>Lepomis macrochirus</i> 96h = 40761mg/L <i>Oncorhynchus mykiss</i> 96h = 41000mg/L <i>Oncorhynchus mykiss</i> 96h
Carbon Dioxide	-	-

Chemical name	Algae/aquatic plants	Fish LC50
Morpholine	=28mg/L Pseudokirchneriella subcapitata 96h	375 - 460mg/L Oncorhynchus mykiss 96h = 350mg/L Lepomis macrochirus 96h > 1000mg/L Brachydanio rerio 96h

Persistence and degradability No data available.

Bioaccumulation

Chemical name	CAS-No	Partition coefficient (log Kow)	Bioconcentration factor (BCF)
Methanol 67-56-1	67-56-1	-0.77	<10 species: fish
Isopropyl alcohol 67-63-0	67-63-0	0.05 at 25 °C	-
Propane 74-98-6	74-98-6	2.3 <=2.8	-
Ethylene glycol 107-21-1	107-21-1	-1.93	-
Carbon Dioxide 124-38-9	124-38-9	-	no bioaccumulation
Morpholine 110-91-8	110-91-8	-2.55 at 25 °C	0.3 - 2.8 BCF method: OECD 305C

Mobility in soil Not available.

Other adverse effects No adverse affects expected

13. DISPOSAL CONSIDERATIONS

Disposal information

Collect and contain for disposal. Contents under pressure. Do not puncture, incinerate, or crush. This material and its container must be disposed of as hazardous waste. Do not allow product to reach sewage system, soil, surface or ground water, or any water course. Notify proper authorities if entry occurs. Dispose of via licensed waste disposal contractor. Collect, transport, store or dispose in accordance with local, state, provincial and federal regulations.

Contaminated packaging

This material and its containers must be disposed of in a safe way. Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORTATION INFORMATION

Shipping Descriptions

DOT

ID-No UN1950
 Proper shipping name Aerosols, flammable
 Hazard Class(es) 2.1
 Special Provisions LTD QTY

TDG

ID-No UN1950
 Proper shipping name Aerosols, flammable
 Hazard Class(es) 2.1
 Special Provisions LTD QTY

IATA

ID-No UN1950
 Proper shipping name Aerosols, flammable

Hazard Class(es) 2.1
Special Provisions LTD QTY

IMDG/IMO

ID-No UN1950
Proper shipping name Aerosols
Hazard Class(es) 2.1
EmS No F-D, S-U
Marine pollutant No

Marine Pollutants

Chemical name	CAS-No	USDOT Marine Pollutant	Canada TDG Marine Pollutant	IMDG Marine Pollutant
Methanol	67-56-1	-	-	-
Isopropyl alcohol	67-63-0	-	-	-
Propane	74-98-6	-	-	-
Ethylene glycol	107-21-1	-	-	-
Carbon Dioxide	124-38-9	-	-	-
Morpholine	110-91-8	-	-	-

Special Precautions

Multi-modal shipping descriptions are provided for informational purposes and do not consider container size. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

15. REGULATORY INFORMATION**State regulations****U.S. state Right-to-Know regulations**

Chemical name	CAS-No	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK
Methanol	67-56-1	X	X	X
Isopropyl alcohol	67-63-0	X	X	X
Propane	74-98-6	X	X	X
Ethylene glycol	107-21-1	X	X	X
Carbon Dioxide	124-38-9	X	X	X
Morpholine	110-91-8	X	X	X

California Prop. 65

WARNING: This product contains a chemical(s) known to the state of California to cause birth defects or other reproductive harm

Chemical name	CAS-No	California Prop. 65
Methanol	67-56-1	Developmental
Isopropyl alcohol	67-63-0	-
Propane	74-98-6	-
Ethylene glycol	107-21-1	Developmental
Carbon Dioxide	124-38-9	-
Morpholine	110-91-8	-

U.S. Federal Regulations

US EPA SARA 313

Chemical name	CAS-No	CERCLA/SARA Hazardous Substances RQ	SARA 313 - Threshold Values
Methanol	67-56-1	5000 lb 2270 kg	1.0 %
Isopropyl alcohol	67-63-0	-	1.0 %
Propane	74-98-6	-	-
Ethylene glycol	107-21-1	5000 lb 2270 kg	1.0 %
Carbon Dioxide	124-38-9	-	-
Morpholine	110-91-8	-	-

US EPA SARA 311/312
hazardous categorization

Acute Health Hazard
Chronic Health Hazard
Fire Hazard

TSCA and Canadian Inventories

Chemical name	Inventory - United States - Section 8(b) Inventory (TSCA)	U.S. - TSCA (Toxic Substances Control Act) - Section 12(b) - Export Notification	DSL	NDSL
Methanol	X	-	X	X
Isopropyl alcohol	X	-	X	X
Propane	X	-	X	-
Ethylene glycol	X	-	X	-
Carbon Dioxide	X	-	X	-
Morpholine	X	-	X	-

Legend X - Listed

16. OTHER INFORMATION

NFPA

Health Not available
Flammability Not available
Instability Not available

HMIS

Health Not available
Flammability Not available
Physical hazards Not available

Notice: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

Prepared by Regulatory Affairs

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Revision note**Key to abbreviations**

ACGIH (American Conference of Governmental Industrial Hygienists)
ATE (Average Toxicity Estimate)
DSL/NDSL (Domestic Substance List/Non-Domestic Substance List)
HMIS (Hazardous Materials Identification System)
IARC (International Agency for Research on Cancer)
IATA (International Air Transport Association)
IMDG/IMO (International Maritime Dangerous Goods/International Maritime Organization)
NFPA (National Fire Protection Association)
NTP (National Toxicology Program)
OEL (Occupational Exposure Level)
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
PEL (Permissible Exposure Limit)
TSCA (Toxic Substance Control Act)
USEPA (United States Environmental Protection Agency)

Disclaimer

The information accumulated herein is believed to be accurate, but is not warranted to be, whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

End of Safety Data Sheet