

SAFETY DATA SHEET

Lock De-Icer

Version: 2.2.1

Update:06/12/2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Lock Deicer
Product No. 00500-V; 05002-V; 00502-V; 00500-VCS12; 00500-VFB24

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

Identified uses Lock Deicer

1.3. Details of the supplier of the safety data sheet

Importer HOPKINS MANUFACTURING CORPORATION
428 PEYTON ST.
EMPORIA, KS 66801
918 540-7943

Charlie.Forbis@hopkinsmfg.com

Manufacture

Shieun Ta Industry CO.,Ltd.
No.34-12,Lane194,Chung Cheng 3rd Rd,Ying Ko District
New Taipei City,Taiwan.
Tel: + 886 2 2670 7931
Fax:+ 886 2 2670 7914
shieun-ta@umail.hinet.net

1.4. Emergency telephone number




USA: 888.694.2355
International +886 2 2670 793

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Flammable aerosols, Category 2
Gas under pressure : Compressed gas
Eye irritation, Category 2A

2.2. Label elements

Symbol: GHS02  , GHS07  , GHS04 

Signal word: Danger

Hazard statements:

H280 - contains gas under pressure; may explode if heated
OSHA-H01 - may displace oxygen and cause rapid suffocation
CGA-HG01 - may cause frostbite
CGA-HG03 - may increase respiration and heart rate
Extremely flammable aerosols.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary statements:

General precautionary statements

If medical advice is needed, have product container or label at hand.
Keep out of reach of children.

Read label before use.

Prevention precautionary statements

Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
Avoid breathing mist, spray, vapours.
Use only outdoors or in a well-ventilated area.

Response precautionary statements

IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing.

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IF IN EYES: Rinse cautiously with water for several minutes.
IF EYES IRRITATION PERSISTS: Get medical advice/attention.

Storage precautionary statements

Store in a well ventilated place.

Store at temperatures not exceeding 50°C/122°F

Do not expose to temperatures exceeding 50 °C/122 °F




Disposal precautionary statements

Dispose of contents/container to comply with local, state and federal regulations.

2.3. Other hazards

No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Identification | Name | Classification | w/w % |
|----------------|-------------------|---|--------------|
| CAS: 67-63-0 | Isopropyl Alcohol |  Flam. Liq.2, H225  Eye Irrit.2, H319; STOT SE3, H336 | 95.0 ~ 97.0 |
| EC : 200-661-7 | | | |
| CAS:8042-47-5 | Mineral Oil | Not classified. | 1.0 ~ 2.5 |
| EC :232-455-8 | | | |
| CAS: 124-38-9 | Carbon Dioxide |  Press. Gas; H280 | 1.0 ~ 5.0 |
| EC : 204-696-9 | | | |
| Total | | | 100.0 |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4 : FIRST AID MEASURES

4.1. Description of first aid measures

First-aid measures general

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.

First-aid measures after inhalation

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

First-aid measures after skin contact

Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.

First-aid measures after eye contact

Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

First-aid measures after ingestion

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Give activated charcoal. Call Poison Information Centre. Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Doctor: gastric lavage.

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

Symptoms/injuries after inhalation

EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.

Symptoms/injuries after skin contact

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Dry skin.

Symptoms/injuries after eye contact

Irritation of the eye tissue

Symptoms/injuries after ingestion

AFTER ABSORPTION OF HIGH QUANTITIES: Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Body temperature fall. Slowing respiration.

Chronic symptoms

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

SECTION 5 : FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use: Foam, carbon dioxide or dry powder.

Unsuitable extinguishing media

Do not use water jet as an extinguisher.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

During fire, toxic gases (CO, CO₂) are formed.

Unusual Fire & Explosion Hazards

Extremely flammable. Aerosol cans may explode in a fire.

Specific hazards

When heated and in case of fire, harmful vapours/gases may be formed.

5.3. Advice for fire-fighters

Special Fire Fighting Procedures

Cool containers exposed to flames with water until well after the fire is out.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment Gloves. Protective goggles.

Emergency procedures Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. No smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Use non-sparking tools.

6.1.2. For emergency responders

Protective equipment Equip cleanup crew with proper protection. Do not breathe gas, fumes, vapour or spray.

Emergency procedures Stop leak if safe to do so. Ventilate area. If a major spill occurs, all personnel should be immediately evacuated and the area ventilated.

6.2. Environmental precautions

Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

For containment Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Dam up the liquid spill. Try to reduce evaporation. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing.

Methods for cleaning up Take up liquid spill into absorbent material, e.g.: dry sand/earth/vermiculite or powdered limestone. Do not use compressed air for pumping over spills. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

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6.4. Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Provide good ventilation. Avoid contact with eyes. Wash hands after handling.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Aerosol cans: Must not be exposed to direct sunlight or temperatures above 50°C.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

| Isopropyl Alcohol (67-63-0) | | | |
|-----------------------------|----------------|-----------------------|----------------|
| USA ACGIH TWA | USA ACGIH STEL | OSHA PEL (TWA) | OSHA PEL (TWA) |
| 200 ppm | 400 ppm | 980 mg/m ³ | 400 ppm |

8.2. Exposure controls

Engineering measures

Provide adequate ventilation.

Personal protective equipment

Gloves. Safety glasses. Avoid all unnecessary exposure.



Hand protection

For prolonged or repeated skin contact use suitable protective gloves.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Respiratory protection

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

THIS PRODUCT IS A COLORLESS LIQUID IN A PRESSURIZED CAN (AEROSOL CAN), WITH CARBON DIOXIDE AS A PROPELLANT. THE FOLLOWING VALUES ARE FOR THE MAIN COMPONENT—ISOPROPYL ALCOHOL (67-63-0)

Appearance : Clear liquid.

Odor : Alcohol odor

Specific Gravity : 0.786

Ph as supplied : N/A

Boiling Point (°F) : 180 (AT 760 mm Hg.)

Melting Point(°F) : -127

Flash point : 12 °C

Evaporation Rate (n-Butyl Acetate=1) : 1.5

Vapor Pressure (mm Hg): 33 (AT 68 °F)

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Vapor Density (AIR=1) : 2.1
Solubility in Water : Miscible.

9.2 Other information

VOC content: > 96 %

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

| Isopropyl Alcohol (67-63-0) | |
|------------------------------|----------------------|
| LD50 oral rat | 5045 mg/kg (Rat) |
| LD50 dermal rabbit | 12870 mg/kg (Rabbit) |
| LC50 inhalation rat (mg/l) | 73 mg/l/4h (Rat) |
| Mineral Oil (8042-47-5) | |
| LD50 oral rat | Not available |
| LD50 dermal rabbit | Not available |
| LC50 inhalation rat (mg/l) | Not available |
| Carbon Dioxide (124-38-9) | |
| LD50 oral rat | Not available |
| LD50 dermal rabbit | Not available |
| LC50 inhalation rat (mg/l) | Not available |

Skin corrosion/irritation

Not classified

Serious eye damage/irritation

Causes eye irritation.

Respiratory or skin sensitization

Not classified

Germ cell mutagenicity

Not classified

Carcinogenicity

Not classified

Reproductive toxicity

Not classified

Symptoms/injuries after inhalation

EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.

Symptoms/injuries after skin contact

Dry skin.

Symptoms/injuries after eye contact

Irritation of the eye tissue.

Symptoms/injuries after ingestion

AFTER ABSORPTION OF HIGH QUANTITIES: Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Body temperature fall. Slowing

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Chronic symptoms

respiration.

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

This product is not expected to be hazardous to the environment.

12.1. Toxicity

Ecology – general Not available.

Ecology – air Not available.

Ecology – water Ground water pollutant. Not harmful to fishes (LC50(96h) >1000 mg/l). Not harmful to invertebrates (Daphnia) (EC50 (48h) > 1000 mg/l). Not harmful to algae (EC50 (72h) >1000 mg/l).

| Isopropyl Alcohol (67-63-0) | |
|------------------------------|---|
| LC50 fishes 1 | 4200 mg/l (96 h; Rasbora heteromorpha; Flow-through system) |
| EC50 Daphnia 1 | > 10000 mg/l (48 h; Daphnia magna) |
| LC50 fish 2 | 9640 mg/l (96 h; Pimephales promelas; Lethal) |
| EC50 Daphnia 2 | 13299 mg/l (48 h; Daphnia magna) |
| Threshold limit algae 1 | > 1000 mg/l (72 h; Scenedesmus subspicatus; Growth rate) |
| Threshold limit algae 2 | 1800 mg/l (72 h; Algae; Cell numbers) |
| Mineral Oil (8042-47-5) | Not available |
| Carbon Dioxide (124-38-9) | Not available |

12.2. Persistence and degradability

| Isopropyl Alcohol (67-63-0) | |
|--|---|
| Persistence and degradability | Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test) data on mobility of the substance available. |
| Biochemical oxygen demand (BOD) | 1.19 g O ² /g substance |
| Chemical oxygen demand (COD) | 2.23 g O ² /g substance |
| ThOD | 2.40 g O ² /g substance |
| BOD (% of ThOD) | 0.49 % ThOD |

12.3. Bioaccumulative potential

| Isopropyl Alcohol (67-63-0) | |
|------------------------------|--|
| Log Pow | 0.05 (Experimental value) |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

| | |
|--------------------------------|---------------|
| Mineral Oil (8042-47-5) | Not available |
|--------------------------------|---------------|

| | |
|----------------------------------|---------------|
| Carbon Dioxide (124-38-9) | Not available |
|----------------------------------|---------------|

12.4. Mobility in soil

No further relevant information available.

12.5. Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6. Other adverse effects

Not determined.

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SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Make sure containers are empty before discarding (explosion risk). Recover and reclaim or recycle, if practical.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN) 1950

UN No. (IMDG) 1950

UN No. (ICAO) 1950

14.2. UN proper shipping name

Proper Shipping Name AEROSOLS

14.3. Transport hazard class(es)

ADR/RID/ADN Class 2

ADR/RID/ADN Class Class 2: Gases

ADR Label No.: 2.1

IMDG Class: 2

ICAO Class/Division: 2.1

Transport Label(s):



14.4. Packing group

Packing Group II – medium danger

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant: No.

14.6. Special precautions for user

EmS (Emergency Schedules) Code: F-D, S-U

Tunnel Restriction Code: (D)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations:

All ingredients of this product are listed, or are exempt from listing on the TSCA inventory. Export notification is required under TSCA sec 12-B.

Regulatory status of hazardous chemical constituents of this product :

| Ingredient | Extremely Hazardous* | Toxic Chemical** | 12B Export Notification |
|--------------------------------|----------------------|------------------|-------------------------|
| ISOPROPYL ALCOHOL 67-63-0 | NO | NO | REQUIRED |
| CARBON DIOXIDE 124-38-9 | NO | NO | NOT REQUIRED |
| WHITE MINERAL OIL 8042-47-5 | NO | NO | NOT REQUIRED |

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*Consult the appropriate regulations for emergency planning and release reporting requirements for substances on the SARA Section 301 Extremely Hazardous Substance List.

**Substances for which the "Toxic Chemical" column is marked "Yes" are on the SARA Section 313 list of Toxic Chemicals, for which release reporting may be required. For specific requirements, consult the appropriate regulations.

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories: Fire Hazard -- Yes

Reactive Hazard -- No

Release of Pressure -- Yes

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

State Right to Know:

Rhode Island, Pennsylvania, Florida, Minnesota, Massachusetts, New Jersey, Tennessee, Illinois.

| Name | CAS No. |
|-------------------|-----------|
| Isopropyl Alcohol | 67-63-0 |
| Mineral Oil | 8042-47-5 |
| Carbon Dioxide | 124-38-9 |

Canadian regulations:

Canadian DSL/NDSL inventory status :

The components of this product are on the DSL inventory.

Canadian environmental Protection Act (CEPA) priorities substances lists :

The components of this product are not on the (CEPA) priorities lists.

Canadian WHMIS classification and symbols:

Class A : Compressed gas

Class B5 : Flammable Aerosols

Class D2B: Skin or eye irritation

15.2. Chemical Safety Assessment

Not applicable, this product is a mixture.

SECTION 16: OTHER INFORMATION

General information

AEROSOL CAUTION: Pressurised container. Protect from sunlight. Do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material. Keep out of the reach of children. Keep away from sources of ignition - no smoking.

Safety Data Sheet Status

Revision Date: NOV-13-2014

Risk Phrases In Full

R11 Highly flammable.

R36 Irritating to eyes.

R67 Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H222 Extremely flammable aerosols.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

STOT SE 3 Specific Target Organ Toxicity Single exposure, Category 3, Narcosis

NFPA Rating:

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| | |
|--------------------|--|
| NFPA health hazard | 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given. |
| NFPA fire hazard | 3 - Liquids and solids that can be ignited under almost all ambient conditions. |
| NFPA reactivity | 0 - Normally stable, even under fire exposure conditions, and are not reactive with water. |

HMIS Classification:

| | |
|---------------------|--|
| Health | 1 Slight Hazard - Irritation or minor reversible injury possible |
| Flammability | 3 Serious Hazard |
| Physical | 0 Minimal Hazard |
| Personal Protection | B  Safety Glasses  Gloves |

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