SAFETY DATA SHEET
Lock De-Icer

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

1.1. Product identifier

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

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

1.3. Details of the supplier of the safety data sheet

Importer: Bell Automotive Products, Inc.
18940 N. Pima Road, Suite 200 Scottsdale, AZ 85255
Tel: 888.694.2355
Fax: 480.991.5595
rlee@bellautomotive.com

Manufacturer: Shieun Ta Industry CO., Ltd.
No.34-12, Lane 194, 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
Eye irritation, Category 2A

2.2. Label elements

Symbol: GHS02, GHS07
Signal word: Danger
Hazard statements:
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.
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

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

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

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

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

Symptoms/injuries after inhalation

Symptoms/injuries after skin contact
Dry skin.

Symptoms/injuries after eye contact
Irritation of the eye tissue

Symptoms/injuries after ingestion

Chronic symptoms
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.

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.

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

<table>
<thead>
<tr>
<th>Isopropyl Alcohol (67-63-0)</th>
<th>USA ACGIH TWA</th>
<th>USA ACGIH STEL</th>
<th>OSHA PEL (TWA)</th>
<th>OSHA PEL (TWA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>200 ppm</td>
<td>400 ppm</td>
<td>980 mg/m³</td>
<td>400 ppm</td>
</tr>
</tbody>
</table>

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)
- **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

<table>
<thead>
<tr>
<th>Acute toxicity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol (67-63-0)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>5045 mg/kg (Rat)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>12870 mg/kg (Rabbit)</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>73 mg/l/4h (Rat)</td>
</tr>
<tr>
<td>Mineral Oil (8042-47-5)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>Not available</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>Not available</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>Not available</td>
</tr>
<tr>
<td>Carbon Dioxide (124-38-9)</td>
<td></td>
</tr>
<tr>
<td>LD50 oral rat</td>
<td>Not available</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>Not available</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>Not available</td>
</tr>
</tbody>
</table>

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 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.

Chronic symptoms

SECTION 12: ECOLOGICAL INFORMATION

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

12.1. Toxicity

<table>
<thead>
<tr>
<th>Ecology</th>
<th>Not available.</th>
</tr>
</thead>
</table>

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).

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

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Isopropyl Alcohol (67-63-0)</th>
<th>Persistence and degradability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biochemical oxygen demand (BOD)</strong></td>
<td>1.19 g O²/g substance</td>
</tr>
<tr>
<td><strong>Chemical oxygen demand (COD)</strong></td>
<td>2.23 g O²/g substance</td>
</tr>
<tr>
<td><strong>ThOD</strong></td>
<td>2.40 g O²/g substance</td>
</tr>
<tr>
<td><strong>BOD (% of ThOD)</strong></td>
<td>0.49 % ThOD</td>
</tr>
</tbody>
</table>
12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol (67-63-0)</td>
<td>Low potential for bioaccumulation (Log Kow &lt; 4).</td>
</tr>
<tr>
<td>Log Pow</td>
<td>0.05 (Experimental value)</td>
</tr>
<tr>
<td>Mineral Oil (8042-47-5)</td>
<td>Not available</td>
</tr>
<tr>
<td>Carbon Dioxide (124-38-9)</td>
<td>Not available</td>
</tr>
</tbody>
</table>

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.

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 MARPOL 73/78 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:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Extremely Hazardous*</th>
<th>Toxic Chemical**</th>
<th>12B Export Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISOPROPYL ALCOHOL 67-63-0</td>
<td>NO</td>
<td>NO</td>
<td>REQUIRED</td>
</tr>
<tr>
<td>CARBON DIOXIDE 124-38-9</td>
<td>NO</td>
<td>NO</td>
<td>NOT REQUIRED</td>
</tr>
<tr>
<td>WHITE MINERAL OIL 8042-47-5</td>
<td>NO</td>
<td>NO</td>
<td>NOT REQUIRED</td>
</tr>
</tbody>
</table>

*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:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl Alcohol</td>
<td>67-63-0</td>
</tr>
<tr>
<td>Mineral Oil</td>
<td>8042-47-5</td>
</tr>
<tr>
<td>Carbon Dioxide</td>
<td>124-38-9</td>
</tr>
</tbody>
</table>

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:

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

HMIS Classification:

<table>
<thead>
<tr>
<th>Health</th>
<th>1</th>
<th>Slight Hazard - Irritation or minor reversible injury possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>3</td>
<td>Serious Hazard</td>
</tr>
<tr>
<td>Physical</td>
<td>0</td>
<td>Minimal Hazard</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>B</td>
<td>Safety Glasses, Gloves</td>
</tr>
</tbody>
</table>

Disclaimer of liability

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and the manufacturer/distributor assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.