SAFETY DATA SHEET

Revision Date 09-Sep-2016
Version 1

1. IDENTIFICATION

Product identifier
Product Name LBM-100 LASER ADDITIVE BONDING

In case of emergency
CHEMTREC: 1 800 424 9300
(OUTSIDE US): 1 703 527 3887
COMPANY: 1 844 577 7772

Other means of identification
Product Code SUP-15747-013
UN/ID no. UN1950
SKU(s) None

Recommended use of the chemical and restrictions on use
Recommended Use No information available.
Uses advised against No information available

Details of the supplier of the safety data sheet
Supplier/Manufacturer Laser Bonding Technology
5336 Vincent Avenue
Los Angeles, CA 90041

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard Statement</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Category 1B</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Flammable aerosols</td>
<td>Category 1</td>
</tr>
</tbody>
</table>

Emergency Overview

Danger

Hazard statements
Causes serious eye irritation
May cause genetic defects
May cause cancer
May cause drowsiness or dizziness
Extremely flammable aerosol
Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information
* Causes mild skin irritation
Unknown acute toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>15 - 40</td>
<td>*</td>
</tr>
<tr>
<td>Acetone</td>
<td>67-64-1</td>
<td>15 - 40</td>
<td>*</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>10 - 30</td>
<td>*</td>
</tr>
<tr>
<td>Butane</td>
<td>106-97-8</td>
<td>5 - 10</td>
<td>*</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>7439-98-7</td>
<td>1 - 5</td>
<td>*</td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>14808-60-7</td>
<td>1 - 5</td>
<td>*</td>
</tr>
<tr>
<td>Ethylene Glycol Butyl Ether</td>
<td>111-76-2</td>
<td>1 - 5</td>
<td>*</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone</td>
<td>108-10-1</td>
<td>0.1 - 1</td>
<td>*</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice
Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.
Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. If symptoms persist, call a physician.

Skin Contact
Wash off immediately with plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

Inhalation
Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

Ingestion
Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Clean mouth with water and drink afterwards plenty of water. Call a physician.

Self-protection of the first aider
Remove all sources of ignition. Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed
Symptoms
No information available.

Indication of any immediate medical attention and special treatment needed
Note to physicians
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
Flash back possible over considerable distance. Extremely flammable.

Explosion data
Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters
In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions
Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Take precautionary measures against static discharges. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions
Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up
Methods for containment  
Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up  
Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling  
Ensure adequate ventilation, especially in confined areas. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can.

Conditions for safe storage, including any incompatibilities

Storage Conditions  

Incompatible materials  
Strong acids. Strong oxidizing agents. Chlorinated compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol 64-17-5</td>
<td>STEL: 1000 ppm</td>
<td>TWA: 1000 ppm</td>
<td>IDLH: 3300 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 1900 mg/m³</td>
<td>TWA: 1000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 1000 ppm</td>
<td>TWA: 1900 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 1900 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Acetone 67-64-1</td>
<td>STEL: 500 ppm</td>
<td>TWA: 1000 ppm</td>
<td>IDLH: 2500 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA: 250 ppm</td>
<td>TWA: 2000 mg/m³</td>
<td>TWA: 250 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 2000 mg/m³</td>
<td>TWA: 600 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 2400 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The acetone STEL does not apply to the</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>cellulose acetate fiber industry. It is</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>in effect for all other sectors</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 1000 ppm</td>
<td></td>
</tr>
<tr>
<td>Propane 74-98-6</td>
<td>: See Appendix F: Minimal Oxygen Content</td>
<td>TWA: 1000 ppm</td>
<td>IDLH: 2100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA: 1800 mg/m³</td>
<td>TWA: 2000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 1000 ppm</td>
<td>TWA: 1800 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 1800 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Butane 106-97-8</td>
<td>STEL: 1000 ppm</td>
<td>TWA: 800 ppm</td>
<td>TWA: 800 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 1900 mg/m³</td>
<td>TWA: 1900 mg/m³</td>
</tr>
<tr>
<td>Molybdenum 7439-98-7</td>
<td>TWA: 10 mg/m³ inhalable fraction</td>
<td>(vacated) TWA: 10 mg/m³</td>
<td>IDLH: 5000 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA: 3 mg/m³ respirable fraction</td>
<td>(vacated) TWA: 10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>TWA: 0.025 mg/m³ respirable fraction</td>
<td>(vacated) TWA: 0.1 mg/m³ respirable dust</td>
<td>IDLH: 50 mg/m³ respirable dust</td>
</tr>
<tr>
<td>14808-60-7</td>
<td></td>
<td>(30)/(%SiO2 + 2) mg/m³</td>
<td>TWA respirable dust</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(250)/(%SiO2 + 5) mppcf TWA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10)/(%SiO2 + 2) mg/m³ TWA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 0.05 mg/m³ respirable dust</td>
<td></td>
</tr>
</tbody>
</table>
Ethylene Glycol Butyl Ether 111-76-2

TWA: 20 ppm
TWA: 50 ppm
TWA: 240 mg/m³
(vacated) TWA: 25 ppm
(vacated) TWA: 120 mg/m³
(vacated) S*

StEL: 75 ppm
TWA: 20 ppm

TWA: 700 ppm
TWA: 5 ppm
TWA: 24 mg/m³

IDLH: 700 ppm

Methyl Isobutyl Ketone 108-10-1

STEL: 75 ppm
TWA: 20 ppm

TWA: 100 ppm
TWA: 410 mg/m³
(vacated) TWA: 50 ppm
(vacated) TWA: 205 mg/m³
(vacated) STEL: 75 ppm
(vacated) STEL: 300 mg/m³

IDLH: 500 ppm

STEL: 75 ppm
STEL: 300 mg/m³

NIOSH IDLH Immediately Dangerous to Life or Health

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls**
- Showers
- Eyewash stations
- Ventilation systems.

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

- **Eye/face protection**
  Wear safety glasses with side shields (or goggles). Tight sealing safety goggles. Face protection shield.

- **Skin and body protection**
  No special technical protective measures are necessary.

- **Respiratory protection**
  If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**
When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Aerosol</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>&gt;= -42 °C / -44 °F</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>-104 °C / -155 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.79</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>
Explosive properties
No information available
Oxidizing properties
No information available
Other Information
Softening point
No information available
Molecular weight
No information available
VOC Content (%)
No information available
Density
6.55 lbs/gal
Bulk density
No information available
Percent solids by weight
10.1%
Percent volatile by weight
57.9%
Percent solids by volume
0.0%
Actual VOC (lbs/gal)
3.8
Actual VOC (grams/liter)
454.7
EPA VOC (lbs/gal)
5.6
EPA VOC (grams/liter)
665.7
EPA VOC (lb/gal solids)
0

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials
Strong acids. Strong oxidizing agents. Chlorinated compounds.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
No data available

Inhalation
No data available.

Eye contact
No data available.

Skin Contact
No data available.

Ingestion
No data available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol 64-17-5</td>
<td>= 7060 mg/kg (Rat)</td>
<td>-</td>
<td>= 124.7 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Acetone 67-64-1</td>
<td>= 5800 mg/kg (Rat)</td>
<td>-</td>
<td>= 50100 mg/m³ (Rat) 8 h</td>
</tr>
</tbody>
</table>
Propane 74-98-6
Butane 106-97-8
Molybdenum 7439-98-7
Crystalline Silica 14808-60-7
Ethylene Glycol Butyl Ether 111-76-2
Methyl Isobutyl Ketone 108-10-1

Information on toxicological effects

Symptoms
No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity
Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol 64-17-5</td>
<td>A3</td>
<td>Group 1</td>
<td>Known</td>
<td>X</td>
</tr>
<tr>
<td>Crystalline Silica 14808-60-7</td>
<td>A2</td>
<td>Group 1</td>
<td>Known</td>
<td>X</td>
</tr>
<tr>
<td>Ethylene Glycol Butyl Ether 111-76-2</td>
<td>A3</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone 108-10-1</td>
<td>A3</td>
<td>Group 2B</td>
<td>-</td>
<td>X</td>
</tr>
</tbody>
</table>

ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
Group 3 - Not classifiable as a human carcinogen
NTP (National Toxicology Program)
Known - Known Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Reproductive toxicity
No information available.

STOT - single exposure
No information available.

STOT - repeated exposure
Ethanol has been shown to be a reproductive toxin only when consumed as an alcoholic beverage. Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

Chronic toxicity
Ethanol has been shown to be carcinogenic in long-term studies only when consumed as alcoholic beverage. Avoid repeated exposure. May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin.

Target Organ Effects
blood, Central nervous system, Eyes, Hematopoietic System, kidney, liver, lungs, Reproductive System, Respiratory system, Skin.

Aspiration hazard
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document  mg/kg  mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity
33.23% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
</table>
Ethanol
64-17-5

- 12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through

Acetone
67-64-1

- 4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50

Ethylene Glycol Butyl Ether
111-76-2

- 1490: 96 h Lepomis macrochirus mg/L LC50 static 2950: 96 h Lepomis macrochirus mg/L LC50

Methyl Isobutyl Ketone
108-10-1

400: 96 h Pseudokirchneriella subcapitata mg/L EC50 496 - 514: 96 h Pimephales promelas mg/L LC50 flow-through 170: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**
No information available.

**Bioaccumulation**
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol 64-17-5</td>
<td>-0.32</td>
</tr>
<tr>
<td>Acetone 67-64-1</td>
<td>-0.24</td>
</tr>
<tr>
<td>Propane 74-98-6</td>
<td>2.3</td>
</tr>
<tr>
<td>Butane 106-97-8</td>
<td>2.89</td>
</tr>
<tr>
<td>Ethylene Glycol Butyl Ether 111-76-2</td>
<td>0.81</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone 108-10-1</td>
<td>1.19</td>
</tr>
</tbody>
</table>

**Other adverse effects**
No information available

### 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

**Disposal of wastes**
Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**
Do not reuse container.

**US EPA Waste Number**
U002 U161

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>RCRA</th>
<th>RCRA - Basis for Listing</th>
<th>RCRA - D Series Wastes</th>
<th>RCRA - U Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone 67-64-1</td>
<td>-</td>
<td>Included in waste stream: F039</td>
<td>-</td>
<td>U002</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone 108-10-1</td>
<td>-</td>
<td>Included in waste stream: F039</td>
<td>-</td>
<td>U161</td>
</tr>
</tbody>
</table>

This product contains one or more substances that are listed with the State of California as a hazardous waste.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol 64-17-5</td>
<td>Toxic Ignitable</td>
</tr>
<tr>
<td>Acetone 67-64-1</td>
<td>Ignitable</td>
</tr>
</tbody>
</table>
14. TRANSPORT INFORMATION

DOT
UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2.1
Description UN1950, Aerosols, 2.1
Emergency Response Guide Number 126

TDG
UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2.1
Description UN1950, Aerosols, 2.1

MEX
UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2
Description UN1950, Aerosols, 2

ICAO (air)
UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2.1
Special Provisions A145, A167
Description UN1950, Aerosols, 2.1

IATA
UN/ID no. UN1950
Proper shipping name Aerosols, flammable
Hazard Class 2.1
ERG Code 10L
Special Provisions A145, A167, A802
Description UN1950, Aerosols, flammable, 2.1

IMDG
UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2
EmS-No. F-D, S-U
Special Provisions 63,190, 277, 327, 344, 959
Description UN1950, Aerosols, 2

RID
UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2.1
Classification code 5F
Description UN1950, Aerosols, 2.1

ADR
UN/ID no. UN1950
Proper shipping name Aerosols
Hazard Class 2.1
Classification code 5F
Tunnel restriction code (D)
15. REGULATORY INFORMATION

### International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Complies *</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Does not comply *</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not comply *</td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies *</td>
</tr>
<tr>
<td>KECL</td>
<td>Complies *</td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies *</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies *</td>
</tr>
</tbody>
</table>

* This product contains an unknown chemical, therefore, this product's compliance to the inventory list is NOT DETERMINED

### Legend:
- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene Glycol Butyl Ether</td>
<td>1.0</td>
</tr>
</tbody>
</table>

#### SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone 67-64-1</td>
<td>5000 lb</td>
<td>-</td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone 108-10-1</td>
<td>5000 lb</td>
<td>-</td>
<td>RQ 5000 lb final RQ</td>
</tr>
</tbody>
</table>

### US State Regulations

---
California Proposition 65
This product contains the following Proposition 65 chemicals

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol - 64-17-5</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>Crystalline Silica - 14808-60-7</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone - 108-10-1</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol 64-17-5</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Acetone 67-64-1</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Propane 74-98-6</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Butane 106-97-8</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Molybdenum 7439-98-7</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Crystalline Silica 14808-60-7</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ethylene Glycol Butyl Ether 111-76-2</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Methyl Isobutyl Ketone 108-10-1</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Propylene Glycol Methyl Ether 107-98-2</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol 64-17-5</td>
<td>X</td>
</tr>
<tr>
<td>Acetone 67-64-1</td>
<td>X</td>
</tr>
<tr>
<td>Propane 74-98-6</td>
<td>X</td>
</tr>
<tr>
<td>Butane 106-97-8</td>
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<tr>
<td>Crystalline Silica 14808-60-7</td>
<td>X</td>
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<td>X</td>
</tr>
<tr>
<td>Ethylene Glycol Butyl Ether 111-76-2</td>
<td>X</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information
EPA Pesticide Registration Number  Not applicable

Hazardous air pollutants (HAPS) content
This product contains no reportable Hazardous Air Pollutants

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

**NFPA**
- Health hazards 2
- Flammability 4
- Instability 0
- Physical and Chemical Properties *

**HMIS**
- Health hazards 2 *
- Flammability 4
- Physical hazards 0
- Personal protection X

* = Chronic Health Hazard

Revision Date 09-Sep-2016
Revision Note
No information available

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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. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

End of Safety Data Sheet