



## 1 IDENTIFICATION

### 1.1 PRODUCT IDENTIFIER

Product Name : LBT100-SP LASER MARKING SPRAY

### 1.2 SUPPLIER/MANUFACTURER

Laser Bonding Technology  
5336 Vincent Avenue  
Los Angeles, CA 90041

### 1.3 EMERGENCY TELEPHONE NUMBER

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

## 2 HAZARDS IDENTIFICATION

### 2.1 CLASSIFICATION

#### OSHA Regulatory Status

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

Flammable Aerosols	Category 1
H319 Eye irritation	Category 2A
H335 Specific target organ toxicity (single exposure)	Category 3
H351 Carcinogenicity	Category 2
Gases under pressure	Category 1

### 2.2 GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS



GHS07 HARMFUL



GHS08 HEALTH HAZARD



GHS02 FLAMMABLE



GHS04 COMPRESSED GAS

#### Hazard statements

- H222 Extremely flammable aerosol
- H280 Contains gas under pressure; may explode if heated
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation
- H351 Suspected of causing cancer

### Precautionary Statements

- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P211 Do not spray on an open flame or other ignition source
- P241 Use explosion-proof electrical/ventilation/lighting/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 face, hands and any exposed skin thoroughly after handling
- P271 Use only outdoors or in a well-ventilated area
- P280 Wear protective gloves/ eye protection / face protection
- P281 Use personal protective equipment as required
- P303 + P361 + P353 If on skin (or hair): Take off all contaminated clothing. Rinse skin with water/shower
- P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P308 + P313 IF exposed or concerned: Get medical advice/attention
- P337 + P313 If eye irritation persists: Get medical advice/attention
- P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol resistant foam to extinguish
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed
- P405 Store locked up
- P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F
- P501 Dispose of contents/container to an approved waste disposal plant

### 2.3 HAZARDS NOT OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS

- Causes mild skin irritation

# 3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS. No.	Weight - %
Acetone	67-64-1	15 - 40
Propane	74-98-6	10 - 30
Proprietary Hydrated Aluminum Molybdenum Silicate Mineral	N/A	15 - 60

The exact percentage (concentration) of composition has been withheld as a trade secret (29 CFR 1910.1200)

# 4 FIRST AID MEASURES

## 4.1 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.

### 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.

### 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.

### Self-Protection of the First Aider

Remove all sources of ignition. Use personal protective equipment as required.

## 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

## 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No information available.

# 5 FIRE-FIGHTING MEASURES

## 5.1 SUITABLE EXTINGUISHING MEDIA

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

## UNSUITABLE EXTINGUISHING MEDIA

Use of water spray when fighting fire may be inefficient.

## 5.2 SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

Flash back possible over considerable distance. Extremely flammable.

## 5.3 EXPLOSION DATA

Sensitivity to Mechanical Impact : **NONE**

Sensitivity to Static Discharge : **NONE**

## 5.4 PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

In the event of fire and/or explosion do not breathe fumes. Use self-contained breathing apparatus if necessary.

# 6 - ACCIDENTAL RELEASE MEASURES

## 6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

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.

## 6.2 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.

### 6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

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. 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

### 7.1 PRECAUTIONS FOR 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.

### 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep in an area equipped with sprinklers. Keep containers tightly closed in a cool, well-ventilated place.

## 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 CONTROL PARAMETERS

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetone 67-64-1	STEL: 500 ppm TWA: 250 ppm	TWA: 1000 ppm TWA: 2400 mg/m <sup>3</sup> (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m <sup>3</sup> (vacated) STEL: 2400 mg/m <sup>3</sup> The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m <sup>3</sup>
Propane 74-98-6	See Appendix F: Minimal Oxygen Content	TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup> (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m <sup>3</sup>	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>
Proprietary Hydrated Aluminum Molybdenum Silicate Mineral	N/A	N/A	N/A

### 8.2 EXPOSURE CONTROLS

#### Appropriate engineering controls

Showers, eyewash stations, ventilation systems.

#### 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

### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Aerosol	<u>OTHER INFORMATION</u>	<u>VALUES</u>	<u>OTHER INFORMATION</u>	<u>VALUES</u>
Appearance	Liquid	Softening point	No information available	Percent solids by volume	0.0 % 3.8
Color	Dark Grey to Black	Molecular weight	No information available	Actual VOC (lbs/gal)	454.7
		VOC content	No information available	Actual (grams/liter)	5.6
		Density	6.55 lbs/gal	EPA VOC (lbs/gal)	665.7
		Bulk density	No information available	EPA VOC (grams/liter)	0
		Percent solids by weight	10.1 %	EPA VOC (lb/gal solids)	
		Percent volatile by weight	57.9 %		

<u>PROPERTY</u>	<u>VALUES</u>	<u>PROPERTY</u>	<u>VALUES</u>	<u>PROPERTY</u>	<u>VALUES</u>
pH	No information available	Vapor pressure	No information available	Kinematic viscosity	No information available
Melting point/freezing point	No information available	Vapor density	No information available	Dynamic viscosity	No information available
Boiling point/boiling range	>= 42 °C / 44 °F	Specific Gravity	0.79	Explosive properties	No information available
Flash point	104 °C / 155 °F	Water solubility	No information available	Oxidizing properties	No information available
Evaporation rate	No information available	Sollubility in other solvents	No information available	Odor	No information available
Flammability (solid, gas)	No information available	Partition coefficient	No information available	Odor threshold	No information available
Flammability Limit in Air		Autoignition temperature	No information available		
Upper flammability limit:	No information available	Decomposition temperature	No information available		
Lower flammability limit:	No information available	Kinematic viscosity	No information available		

## 10 - STABILITY AND REACTIVITY

### 10.1 REACTIVITY

No data available.

### 10.2 CHEMICAL STABILITY

Stable under recommended storage conditions.

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

None under normal processing.

### 10.4 CONDITIONS TO AVOID

Heat, flames and sparks.

### 10.5 INCOMPATIBLE MATERIALS

Strong acids. Strong oxidizing agents. Chlorinated compounds.

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

None known based on information supplied.

## 11 - TOXICOLOGICAL INFORMATION

### 11.1 TOXICOLOGICAL INFORMATION

Toxicological effects for the listed Proprietary Hydrated Aluminum Molybdenum Silicate Mineral have not been tested but are expected to be similar to the related molybdenum trioxide CAS# 1313-27-5. The toxicological data for molybdenum trioxide is listed below and should be used as a guideline.

#### Acute toxicity

LD50 Oral - Rat - male - 2,689 mg/kg (OECD Test Guideline 401)

LD50 Oral - Rat - female - 3,830 mg/kg (OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h -> 5.05 mg/l (OECD Test Guideline 403)

LD50 Dermal - Rat - male and female -> 2,000 mg/kg (OECD Test Guideline 402)

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h

(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

(OECD Test Guideline 405)

#### Respiratory or skin sensitisation

Maximisation Test - Guinea pig

Result: Does not cause skin sensitisation.

(OECD Test Guideline 406)

#### Germ cell mutagenicity

Ames test

S. typhimurium

Result: negative

#### Carcinogenicity

Limited evidence of a carcinogenic effect.

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

May cause respiratory irritation.

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available

# 12 - ECOLOGICAL INFORMATION

## 12.1 ECOLOGICAL EFFECTS

Ecological effects for the listed Proprietary Hydrated Aluminum Molybdenum Silicate Mineral have not been tested but are expected to be similar to the related molybdenum trioxide CAS# 1313-27-5. The ecological data for molybdenum trioxide is listed below and should be used as a guideline.

### Toxicity

Molybdenum Trioxide is not hazardous to the aquatic environment as:

- The lowest acute reference values for fish, invertebrates and algae are > 100 mg Mo/L.
- The lowest aquatic NOEC for these three trophic levels is > 1 mg Mo/L
- There is no evidence for bioaccumulation or bio-magnification in the environment.

### Persistence and degradability

No data available

### Bioaccumulation potential

No data available

### Mobility in soil

No data available

### Results of PBT and vPvB assessment

The PBT and vPvB criteria of "Annex XIII to the Regulation" do not apply to inorganic substances. Therefore a PBT and vPvB assessment is not required.

### Other adverse effects

No data available

# 13 - DISPOSAL CONSIDERATIONS

## 13.1 WASTE DISPOSAL METHOD

### Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste-disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Dispose in accordance with Federal, State and Local regulations.

### Other information

Dispose of as unused product. Do not reuse container. Waste codes should be assigned by the user based on the application for which the product was used.

# 14 - TRANSPORTATION INFORMATION

## 14.1 TRANSPORTATION INFORMATION

### DOT

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

### TDG

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

### IMDG

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

### RID

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

## MEX

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

## ICAO (air)

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

## IATA

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

## ADR

UN/ID no. UN1950  
Proper shipping name Aerosols  
Hazard Class 2.1  
Classification Code 5F  
Tunnel Restriction Code (D)  
Special Provisions 190, 327, 344, 625  
Description UN1950, Aerosols, 2.1, (D)  
Labels 2.1

## ADN

Proper shipping name Aerosols  
Hazard Class 2.1  
Classification Code 5F  
Special Provisions 190, 327, 344, 625  
Description UN1950, Aerosols, 2.1  
Hazard Label(s) 2.1  
Limited Quantity (LQ) 1 L  
Ventilation VE01, VE04

# 15 - REGULATORY INFORMATION

## 15.1 INTERNATIONAL INVENTORIES

TSCA	Complies	IECSC	Complies*
DSL/NDSL	Complies*	KECL	Complies*
EINECS/ELINCS	Does not comply*	PICCS	Complies*
ENCS	Does not comply	AICS	Complies*

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

## 15.2 REGULATORY INFORMATION

### SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### SARA 313 Components

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: Ethylene Glycol Butyl Ether

### SARA 11/312 Hazards

Acute health hazard, chronic health hazard, fire hazard

### California Prop. 65 Components

This product contains Ethanol, Crystalline Silica, and Methyl Isobutyl Ketone, which are known to the State of California to cause cancer.

### New Jersey / Massachusetts Right-to-Know Regulations

Ethanol, Acetone, Propane, Butane, Molybdenum, Crystalline Silica, Ethylene Glycol Butyl Ether, Methyl Isobutyl Ketone, Propylene Glycol Methyl Ether

### Pennsylvania Right-to-Know Regulations

Ethanol, Avetone, Propane, Butane, Crystalline Silica, Molybdenum, Ethylene Glycol Butyl Ether

# 16 - OTHER INFORMATION

NFPA	Health hazards 2	Flammability 4	Instability 0
HMIS	Health hazards 2 *	Flammability 4	Physical hazards 0

Chronic Hazard Star Legend \* = Chronic Health Hazard

Revision Date 15-Mar-2024

Revision Note

No information available

## 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**