



## 1 IDENTIFICATION

### 1.1 PRODUCT IDENTIFIER

Product Name : LBT100-LQ WATER BASED LASER MARKING MATERIAL

### 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)

|   |             |
|---|-------------|
| H319 Eye irritation                                   | Category 2A |
| H335 Specific target organ toxicity (single exposure) | Category 3  |
| H351 Carcinogenicity                                  | Category 2  |

### 2.2 GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS



GHS07 HARMFUL



GHS08 HEALTH HAZARD

#### Hazard statements

- H319 Causes serious eye irritation
- H335 May cause respiratory irritation
- H351 Suspected of causing cancer

### Precautionary Statements - Prevention

- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- 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
- P281 Use personal protective equipment as required
- 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
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed
- P405 Store locked up
- 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 - % |
|---|-----------|------------|
| Water   | 7732-18-5 | 50 - 60    |
| Proprietary Hydrated Aluminum Molybdenum Silicate Mineral | N/A       | 20 - 40    |

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

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

## 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

Put on appropriate personal protective equipment. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

## 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store away from direct sunlight in dry conditions. 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 |
|---|-----------|----------|------------|
| 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

## INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

|                |                    |
|----------------|--------------------|
| Physical state | Semi-liquid paste  |
| Color          | Dark Gray or Black |

## OTHER INFORMATION

|                            | VALUES                   |
|----------------------------|--------------------------|
| Softening point            | No information available |
| Molecular weight           | No information available |
| VOC content                | No information available |
| Density                    | No information available |
| Bulk density               | No information available |
| Percent solids by weight   | No information available |
| Percent volatile by weight | No information available |
| Percent solids by volume   | No information available |
| Actual VOC (lbs/gal)       | No information available |
| Actual (grams/liter)       | No information available |
| EPA VOC (lbs/gal)          | No information available |
| EPA VOC (grams/liter)      | No information available |
| EPA VOC (lb/gal solids)    | No information available |

## PROPERTY

|                               |                            |
|-------------------------------|----------------------------|
| pH                            | 6.9 6.9[Conc.(% w/w):10%]  |
| Melting point/freezing point  | No information available   |
| Boiling point/boiling range   | No information available   |
| Flash point                   | Product is not combustible |
| Evaporation rate              | No information available   |
| Flammability (solid, gas)     | No information available   |
| Flammability Limit in Air     | No information available   |
| Upper flammability limit:     | No information available   |
| Lower flammability limit:     | No information available   |
| Vapor pressure                | No information available   |
| Vapor density                 | No information available   |
| Specific Gravity              | No information available   |
| Water solubility              | Slightly                   |
| Sollubility in other solvents | No information available   |
| Partition coefficient         | No information available   |
| Autoignition temperature      | No information available   |
| Decomposition temperature     | No information available   |
| Kinematic viscosity           | No information available   |
| Dynamic viscosity             | No information available   |
| Explosive properties          | No information available   |
| Oxidizing properties          | No information available   |
| Odor                          | No information available   |
| Odor threshold                | No information available   |

## VALUES

|                               |                            |
|-------------------------------|----------------------------|
| pH                            | 6.9 6.9[Conc.(% w/w):10%]  |
| Melting point/freezing point  | No information available   |
| Boiling point/boiling range   | No information available   |
| Flash point                   | Product is not combustible |
| Evaporation rate              | No information available   |
| Flammability (solid, gas)     | No information available   |
| Flammability Limit in Air     | No information available   |
| Upper flammability limit:     | No information available   |
| Lower flammability limit:     | No information available   |
| Vapor pressure                | No information available   |
| Vapor density                 | No information available   |
| Specific Gravity              | No information available   |
| Water solubility              | Slightly                   |
| Sollubility in other solvents | No information available   |
| Partition coefficient         | No information available   |
| Autoignition temperature      | No information available   |
| Decomposition temperature     | No information available   |
| Kinematic viscosity           | No information available   |
| Dynamic viscosity             | No information available   |
| Explosive properties          | No information available   |
| Oxidizing properties          | No information available   |
| Odor                          | No information available   |
| Odor threshold                | No information available   |

# 10 - STABILITY AND REACTIVITY

## 10.1 REACTIVITY

Non-reactive

## 10.2 CHEMICAL STABILITY

Stable under recommended storage conditions.

## 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

None under normal processing.

## 10.4 CONDITIONS TO AVOID

No data available

## 10.5 INCOMPATIBLE MATERIALS

No data available

## 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 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

## 12.1 ECOLOGICAL EFFECTS

Ecological effects for the listed Proprietary Hydrated Aluminum 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

Containers may still present a chemical hazard or danger when empty. Clean container sufficiently well to ensure that residuals do not remain or reuse container to store the same product, and otherwise puncture containers, to prevent re-use, and bury at an authorized landfill.

### Other information

Before disposing, try to reuse or recycling if possible. Where possible retain label warnings and SDS and observe all notices pertaining to the product. User should investigate reduction as a method. Do not allow wash water from cleaning or process equipment to enter drains. It may be necessary to collect all wash water for treatment before disposal. Disposal to a sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Observe all label safeguards until containers are cleaned and destroyed.

# 14 - TRANSPORTATION INFORMATION

UN number: Not Dangerous for Transport

UN proper shipping name: Not Dangerous for Transport

Transport hazard class: Not Dangerous for Transport

Packing group: Not Dangerous for Transport

Environmental hazards: Not Dangerous for Transport

Special precautions for user: Not Dangerous for Transport

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not Dangerous for Transport

# 15 - REGULATORY INFORMATION

## 15.1 INTERNATIONAL INVENTORIES

|                      |                  |              |           |
|----------------------|------------------|--------------|-----------|
| <b>TSCA</b>          | Complies         | <b>IECSC</b> | Complies* |
| <b>DSL/NDSL</b>      | Complies*        | <b>KECL</b>  | Complies* |
| <b>EINECS/ELINCS</b> | Does not comply* | <b>PICCS</b> | Complies* |
| <b>ENCS</b>          | Does not comply  | <b>AICS</b>  | 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 11/312 Hazards

Acute health hazard, chronic health hazard

### California Prop. 65 Components

This product contains Crystalline Silica, which is known to the State of California to cause cancer.

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

Crystalline Silica, Quartz, Mica, Kaolin Clay

### Pennsylvania Right-to-Know Regulations

Kaolin Clay, Quartz

# 16 - OTHER INFORMATION

|             |                           |                       |                           |   |
|-------------|---------------------------|-----------------------|---------------------------|---|
| <b>NFPA</b> | <b>Health hazards 2</b>   | <b>Flammability 4</b> | <b>Instability 0</b>      | <b>Physical and Chemical Properties *</b> |
| <b>HMIS</b> | <b>Health hazards 2 *</b> | <b>Flammability 4</b> | <b>Physical hazards 0</b> | <b>Personal protection X</b>              |

*Chronic Hazard Star Legend \* = Chronic Health Hazard*

**Revision Date 15-Mar-2024**

**Revision Note**

No information available

### Disclaimer

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