**SECTION 1: Identification**

### 1.1. Identification

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>TheraCal LC</td>
</tr>
</tbody>
</table>

### 1.2. Recommended use and restrictions on use

| Use of the substance/mixture | For RX only |

### 1.3. Supplier

**Manufacturer**

Bisco, Inc.
1100 W. Irving Park Rd.
Schaumburg, IL 60193
T 1.847.534.6000 - F 1.847.891.5049
sales@bisco.com - www.bisco.com

### 1.4. Emergency telephone number

<table>
<thead>
<tr>
<th>Emergency number</th>
<th>CHEMTREC - 24-Hour Hazmat Emergency Communications Center</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Domestic: 1-800-424-9300 Outside the U.S.: 1-703-527-3887, collect calls accepted</td>
</tr>
</tbody>
</table>

**SECTION 2: Hazard(s) identification**

### 2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>GHS-US classification</th>
<th>H315</th>
<th>Causes skin irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation Category 2</td>
<td>H320</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation Category 2B</td>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>Skin sensitization, Category 1</td>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure) Category 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full text of H statements : see section 16

### 2.2. GHS Label elements, including precautionary statements

**GHS-US labeling**

| Hazard pictograms (GHS-US) | ![Hazard pictogram] |

<table>
<thead>
<tr>
<th>Hazard statements (GHS-US)</th>
<th>H315 - Causes skin irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>H317 - May cause an allergic skin reaction</td>
</tr>
<tr>
<td></td>
<td>H320 - Causes eye irritation</td>
</tr>
<tr>
<td></td>
<td>H335 - May cause respiratory irritation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Precautionary statements (GHS-US)</th>
<th>P261 - Avoid breathing vapors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P264 - Wash hands thoroughly after handling</td>
</tr>
<tr>
<td></td>
<td>P271 - Use only outdoors or in a well-ventilated area</td>
</tr>
<tr>
<td></td>
<td>P272 - Contaminated work clothing must not be allowed out of the workplace</td>
</tr>
<tr>
<td></td>
<td>P280 - Wear face protection, protective gloves, eye protection</td>
</tr>
<tr>
<td></td>
<td>P302+P352 - If on skin: Wash with plenty of Wash skin with soap and water</td>
</tr>
<tr>
<td></td>
<td>P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing</td>
</tr>
<tr>
<td></td>
<td>P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</td>
</tr>
<tr>
<td></td>
<td>P312 - Call a POISON CENTER, Call a doctor if you feel unwell</td>
</tr>
<tr>
<td></td>
<td>P321 - Specific treatment (see First aid measures on this label)</td>
</tr>
<tr>
<td></td>
<td>P332+P331 - If skin irritation occurs: Get medical advice/attention</td>
</tr>
<tr>
<td></td>
<td>P337+P331 - If eye irritation persists: Get medical advice/attention</td>
</tr>
<tr>
<td></td>
<td>P362+P364 - Take off contaminated clothing and wash it before reuse</td>
</tr>
<tr>
<td></td>
<td>P363 - Wash contaminated clothing before reuse</td>
</tr>
<tr>
<td></td>
<td>P403+P402 - Store in a well-ventilated place. Keep container tightly closed</td>
</tr>
<tr>
<td></td>
<td>P405 - Store locked up</td>
</tr>
</tbody>
</table>
2.3. Other hazards which do not result in classification
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>BisGMA</td>
<td>(CAS-No.) 1565-94-2</td>
<td>5-10</td>
<td>Skin Irrit. 2, H315, Eye Irrit. 2B, H320, Skin Sens. 1, H317</td>
</tr>
<tr>
<td>Barium Zirconate</td>
<td>(CAS-No.) 12009-21-1</td>
<td>1-5</td>
<td>Acute Tox. 4 (Oral), H302</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures
First-aid measures general : Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : 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.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)
Symptoms/effects after inhalation : May cause respiratory irritation.
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Mild eye irritation.

4.3. Immediate medical attention and special treatment, if necessary
Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

5.2. Specific hazards arising from the chemical
Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Special protective equipment and precautions for fire-fighters
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures : Ventilate spillage area. Avoid breathing mist, vapors. Avoid contact with skin and eyes.

6.1.2. For emergency responders
Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions
Avoid release to the environment.
6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Mechanically recover the product.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Use only outdoors or in a well-ventilated area. Avoid breathing mist, vapors. Avoid contact with skin and eyes. Wear personal protective equipment.

Hygiene measures: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Material</th>
<th>ACGIH TWA (mg/m³)</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Cement (65997-15-1)</td>
<td>1 mg/m³</td>
<td>(Portland cement; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction. The value is for particulate matter containing no asbestos and &lt; 1% crystalline silica)</td>
</tr>
<tr>
<td>Barium Zirconate (12009-21-1)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>BisGMA (1565-94-2)</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Paste.</td>
</tr>
<tr>
<td>Color</td>
<td>Gray</td>
</tr>
<tr>
<td>Odor</td>
<td>Acrylic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>10</td>
</tr>
</tbody>
</table>
**Melting point**: No data available

**Freezing point**: Not applicable

**Boiling point**: No data available

**Flash point**: Not applicable

**Relative evaporation rate (butyl acetate=1)**: No data available

**Flammability (solid, gas)**: Non flammable.

**Vapor pressure**: No data available

**Relative vapor density at 20 °C**: No data available

**Relative density**: Not applicable

**Solubility**: No data available

**Log Pow**: No data available

**Auto-ignition temperature**: Not applicable

**Decomposition temperature**: No data available

**Viscosity, kinematic**: Not applicable

**Viscosity, dynamic**: No data available

**Explosion limits**: Not applicable

**Explosive properties**: No data available

**Oxidizing properties**: No data available

9.2. **Other information**

No additional information available

---

**SECTION 10: Stability and reactivity**

10.1. **Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

10.2. **Chemical stability**

Stable under normal conditions.

10.3. **Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use.

10.4. **Conditions to avoid**

None under recommended storage and handling conditions (see section 7).

10.5. **Incompatible materials**

No additional information available

10.6. **Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

---

**SECTION 11: Toxicological information**

11.1. **Information on toxicological effects**

**Acute toxicity**: Not classified

**Barium Zirconate** (12009-21-1)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>1980 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>N/A</td>
</tr>
<tr>
<td>LC50 inhalation rat (ppm)</td>
<td>N/A</td>
</tr>
<tr>
<td>ATE US (oral)</td>
<td>1980 mg/kg body weight</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**: Causes skin irritation. pH: 10

**Serious eye damage/irritation**: Causes eye irritation. pH: 10

**Respiratory or skin sensitization**: May cause an allergic skin reaction.

**Germ cell mutagenicity**: Not classified

**Carcinogenicity**: Not classified
TheraCal LC
Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : May cause respiratory irritation.

Barium Zirconate (12009-21-1)
LOAEL (oral,rat) : N/A mg/kg body weight
Specific target organ toxicity – repeated exposure : Not classified

Barium Zirconate (12009-21-1)
LOAEL (oral,rat,90 days) : N/A mg/kg bodyweight/day
Aspiration hazard : Not classified
Symptoms/effects after inhalation : May cause respiratory irritation.
Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact : Mild eye irritation.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Portland Cement (65997-15-1)
LC50 fish 1 : > 1000 mg/l (LC50; 96 h)

12.2. Persistence and degradability

Portland Cement (65997-15-1)
Persistence and degradability : Biodegradability: not applicable. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD) : Not applicable
Chemical oxygen demand (COD) : Not applicable
ThOD : Not applicable

12.3. Bioaccumulative potential

Portland Cement (65997-15-1)
Bioaccumulative potential : Bioaccumulation: not applicable.

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Effect on the global warming : No known effects from this product.
GWPmix comment : No known effects from this product.

SECTION 13: Disposal considerations

13.1. Disposal methods
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Other information : No supplementary information available.
SECTION 15: Regulatory information

15.1. US Federal regulations

| Barium Zirconate (12009-21-1) | Listed on the United States TSCA (Toxic Substances Control Act) inventory |

15.2. International regulations

CANADA
No additional information available

EU-Regulations
No additional information available

National regulations
No additional information available

15.3. US State regulations
No additional information available

SECTION 16: Other information

Revision date: 01/04/2018

Full text of H-phrases:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H320</td>
<td>Causes eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.