SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form: Mixture
Product name: TheraCal LC

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

1.2.1. Relevant identified uses
Use of the substance/mixture: For Rx Only

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer:
BISCO, Inc.
1100 W. Irving Park Rd.
Schaumburg, IL 60193
USA
T 1-800-247-3368 or 1-847-534-6000
www.bisco.com

EC REP:
BISICO France
208, allée de la Coudoulette
13680 Lançon de Provence
France
T 33-4-90-42-92-92

1.4. Emergency telephone number

Emergency number: CHEMTREC - 24-Hour Hazmat Emergency Communications Center
Domestic: 1-800-424-9300 Outside the U.S.: 1-703-527-3887, collect calls accepted

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Skin corrosion/irritation, Category 2: H315
Serious eye damage/eye irritation, Category 2: H319
Skin sensitisation, Category 1: H317
Specific target organ toxicity - Single exposure, Category 3, Respiratory tract irritation: H335

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects
May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):

Signal word (CLP): Warning
Contains: Portland Cement, BisGMA
Hazard statements (CLP):
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.

Precautionary statements (CLP):
P261 - Avoid breathing dust, fume, vapours.
P264 - Wash hands thoroughly after handling.
TheraCal LC
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

2.3. Other hazards
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 %

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>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
</table>
| Portland Cement     | CAS-No.: 65997-15-1         | 30 - 50 | Skin Irr. 2, H315  
|                     | EC-No.: 266-043-4           |     | Eye Irr. 2, H319  
|                     |                             |     | Skin Sens. 1, H317  
|                     |                             |     | STOT SE 3, H335 |
| Barium Zirconate    | CAS-No.: 12009-21-1         | 1 - 5 | Acute Tox. 4 (Oral), H302  
|                     | EC-No.: 234-546-8           |     | Acute Tox. 4 (Inhalation), H332 |
|                     | EC Index-No.: 058-002-00-7  |     |                                                                                     |

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor 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 or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both 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: May cause eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media


5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3. Advice for firefighters

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 dust/fume/vapours. 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: Avoid breathing dust/fume/vapours. 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 in a well-ventilated place. Keep container tightly closed. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values
No additional information available

8.1.2. Recommended monitoring procedures
No additional information available

8.1.3. Air contaminants formed
No additional information available

8.1.4. DNEL and PNEC
No additional information available

8.1.5. Control banding
No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

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

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses

8.2.2.2. Skin protection

Skin and body protection:
Wear suitable protective clothing

Hand protection:
Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards
No additional information available
8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

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>Colour</td>
<td>Grey</td>
</tr>
<tr>
<td>Appearance</td>
<td>Paste</td>
</tr>
<tr>
<td>Odour</td>
<td>Acrylic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>10</td>
</tr>
<tr>
<td>pH solution</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (Log Kow)</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour pressure at 50°C</td>
<td>Not available</td>
</tr>
<tr>
<td>Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative vapour density at 20°C</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Particle size</td>
<td>Not available</td>
</tr>
<tr>
<td>Particle size distribution</td>
<td>Not available</td>
</tr>
<tr>
<td>Particle shape</td>
<td>Not available</td>
</tr>
<tr>
<td>Particle aspect ratio</td>
<td>Not available</td>
</tr>
<tr>
<td>Particle aggregation state</td>
<td>Not available</td>
</tr>
<tr>
<td>Particle agglomeration state</td>
<td>Not available</td>
</tr>
<tr>
<td>Particle specific surface area</td>
<td>Not available</td>
</tr>
<tr>
<td>Particle dustiness</td>
<td>Not available</td>
</tr>
</tbody>
</table>

9.2. Other information

9.2.1. Information with regard to physical hazard classes
No additional information available

9.2.2. Other safety characteristics
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 hazard classes as defined in Regulation (EC) No 1272/2008

| Acute toxicity (oral)                  | Not classified |
| Acute toxicity (dermal)               | Not classified |
| Acute toxicity (inhalation)           | Not classified |

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

| LD50 oral rat | 1980 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EPA OPP 81-1 (Acute Oral Toxicity) |

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

**Portland Cement (65997-15-1)**

<table>
<thead>
<tr>
<th>pH</th>
<th>11 - 13.5 (20 °C)</th>
</tr>
</thead>
</table>

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

**Portland Cement (65997-15-1)**

<table>
<thead>
<tr>
<th>pH</th>
<th>11 - 13.5 (20 °C)</th>
</tr>
</thead>
</table>

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

**Portland Cement (65997-15-1)**

STOT-single exposure : May cause respiratory irritation.

**BisGMA (1565-94-2)**

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

**TheraCal LC**

Viscosity, kinematic : Not applicable

**Portland Cement (65997-15-1)**

Viscosity, kinematic : Not applicable (solid)

11.2. Information on other hazards

No additional information available
SECTION 12: Ecological information

12.1. Toxicity

Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute): Not classified

Hazardous to the aquatic environment, long-term (chronic): Not classified

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Cement (65997-15-1)</td>
<td>&gt; 1000 mg/l (96 h, Pisces)</td>
<td>&gt; 1000 mg/l Test organisms (species): Daphnia magna</td>
<td>201.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)</td>
</tr>
</tbody>
</table>

Barium Zirconate (12009-21-1)

<table>
<thead>
<tr>
<th>Persistence and degradability</th>
<th>Biodegradability: not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical oxygen demand (COD)</td>
<td>Not applicable (inorganic)</td>
</tr>
<tr>
<td>ThOD</td>
<td>Not applicable (inorganic)</td>
</tr>
<tr>
<td>BOD (% of ThOD)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

BisGMA (1565-94-2)

| Persistence and degradability | Biodegradability in water: no data available. |

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Product</th>
<th>Persistence and degradability</th>
<th>Biodegradability in water: no data available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Cement (65997-15-1)</td>
<td>Biodegradability: not applicable.</td>
<td></td>
</tr>
<tr>
<td>BisGMA (1565-94-2)</td>
<td>Biodegradability in water: no data available.</td>
<td></td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product</th>
<th>Bioaccumulative potential</th>
<th>No bioaccumulation data available.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Product</th>
<th>Partition coefficient n-octanol/water (Log Pow)</th>
<th>Bioaccumulative potential</th>
<th>No bioaccumulation data available.</th>
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</thead>
<tbody>
<tr>
<td>BisGMA (1565-94-2)</td>
<td>4.94 (Estimated value)</td>
<td>Biodegradability in water: no data available.</td>
<td></td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Product</th>
<th>Surface tension</th>
<th>Ecology - soil</th>
<th>No data available in the literature</th>
<th>No (test)data on mobility of the substance available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portland Cement (65997-15-1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available
SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR) : Not applicable
UN-No. (IMDG) : Not applicable
UN-No. (IATA) : Not applicable
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name

Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : Not applicable
Proper Shipping Name (IATA) : Not applicable
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : Not applicable

IATA
Transport hazard class(es) (IATA) : Not applicable

ADN
Transport hazard class(es) (ADN) : Not applicable

RID
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group

Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport
No data available

Transport by sea
No data available
Air transport
No data available

Inland waterway transport
No data available

Rail transport
No data available

14.7. Maritime transport in bulk according to IMO instruments
Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)
Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)
Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)
Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)
Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

<table>
<thead>
<tr>
<th>Indication of changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Revision date</td>
</tr>
<tr>
<td>Supersedes version of</td>
</tr>
<tr>
<td>Issue date</td>
</tr>
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<td>2.1</td>
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## Indication of changes

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<th>Changed item</th>
<th>Change</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>2.2</td>
<td>Precautionary statements (CLP)</td>
<td>Modified</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Classification according to Regulation (EC) No. 1272/2008 [CLP]</td>
<td>Modified</td>
<td></td>
</tr>
<tr>
<td>7.1</td>
<td>Precautions for safe handling</td>
<td>Modified</td>
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</tr>
<tr>
<td>7.2</td>
<td>Storage conditions</td>
<td>Modified</td>
<td></td>
</tr>
</tbody>
</table>

### Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Inhalation)</th>
<th>Acute toxicity (inhal.), Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral), Category 4</td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<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>H332</td>
<td>Harmful if inhaled.</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Skin sensitisation, Category 1</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity - Single exposure, Category 3, Respiratory tract irritation</td>
</tr>
</tbody>
</table>

*Safety Data Sheet (SDS), EU*

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.