

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 08/03/2018 Version: 3.0

SECTION 1: Identification of the s	ubstance/mixture and of the company/undertaking
I.1. Product identifier	
Product form	: Mixture
Product name	: TheraCal LC
.2. Relevant identified uses of the su	ubstance 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 safe	ety data sheet
Bisco, Inc. 1100 W Irving Park Road, Schaun 1-847-534-6000, during normal business hou <u>www.bisco.com</u>	
EC Representative: Bisico France, 208, allée de la Coudoulette, 1 Telephone: 33-4-90-42-92-92	3680 Lançon de Provence, France
I.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	h
2.1. Classification of the substance o	r mixture
Classification according to Regulation (EC	C) No. 1272/2008 [CLP]
Skin corrosion/irritation, Category 2	H315
, , , ,	H319
2 Skin sensitisation, Category 1	H317
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Full text of H statements : see section 16	
Adverse physicochemical, human health a May cause respiratory irritation. Causes skin	and environmental effects 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)	

	GHS07
Signal word (CLP)	: Warning
Hazardous ingredients	: 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 vapours P264 - Wash hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P272 - Contaminated work clothing should not be allowed out of the workplace P280 - Wear protective gloves, face protection, eye protection P302+P352 - IF ON SKIN: Wash with plenty of soap and water

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

P304+P340 - IF INHALED: Remove person to fresh air and keep 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 P312 - Call a POISON CENTER, a doctor if you feel unwell. P321 - Specific treatment (see First aid measures on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P333+P313 - If skin irritation or rash occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362+P364 - Take off contaminated clothing and wash it before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed P405 - Store locked up P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation, an approved waste disposal plant, a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste, a hazardous or special waste collection point.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Portland Cement	(CAS-No.) 65997-15-1 (EC-No.) 266-043-4	30 - 50	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335
BisGMA	(CAS-No.) 1565-94-2	5 - 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Barium Zirconate	(CAS-No.) 12009-21-1 (EC-No.) 234-546-8 (EC Index-No.) 056-002-00-7	1 - 5	Acute Tox. 4 (Oral), H302

Full text of 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 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 effect	ts, 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	: Eye irritation.		
4.3. Indication of any immediate medica	Indication of any immediate medical attention and special treatment needed		
Treat symptomatically.			
SECTION 5: Firefighting measures			
5.1. Extinguishing media			
Suitable extinguishing media : Water spray. Dry powder. Foam.			
5.2. Special hazards arising from the substance or mixture			

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

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

5.3. Advice for firefigh	nters		
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		
SECTION 6: Accident	al release measures		
6.1. Personal precauti	ions, protective equipment and emergency procedures		
6.1.1. For non-emergen	cy personnel		
Emergency procedures	: Ventilate spillage area. Avoid breathing mist, vapours. Avoid contact with skin and eyes.		
6.1.2. For emergency re	esponders		
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 pro	ecautions		
Avoid release to the environm	nent.		
6.3. Methods and mate	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 othe	er sections		
For further information refer t	to section 13.		
SECTION 7: Handling	and storage		
7.1. Precautions for sa	afe handling		
Precautions for safe handling	 Use only outdoors or in a well-ventilated area. Avoid breathing mist, 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 sat	fe storage, including any incompatibilities		
Storage conditions	: Store locked up. 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

Portland Cement (65997-15-1)			
Belgium	Limit value (mg/m³)	10 mg/m ³ (Ciment portland; Belgium; Time-weighted average exposure limit 8 h)	
United Kingdom	WEL TWA (mg/m³)	10 mg/m ³ Portland cement inhalable dust; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005); Portland cement respirable dust; 4 mg/m ³ ; United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)	
USA - ACGIH	ACGIH TWA (mg/m³)	1 mg/m ³ (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 < 1% crystalline silica)	

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and ch	e	mical properties
Physical state	:	Solid
Appearance	:	Paste.
Colour	:	Grey.
Odour	:	Acrylic.
Odour threshold	:	No data available
pH	:	10
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	Not applicable
Boiling point	:	No data available
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	No data available
Flammability (solid, gas)	:	Non flammable.
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	Not applicable
Solubility	:	No data available
Log Pow	:	No data available
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	Not applicable

9.2. Other information

No additional information available

SECTI	ON 10: Stability and reactivity		
10.1.	Reactivity		
The proc	duct is non-reactive under normal conditions of use, storage and transport.		
10.2.	Chemical stability		
Stable u	nder 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.

SECT	SECTION 11: Toxicological information		
11.1.	Information on toxicologi	cal effects	
Acute t	oxicity (oral)	: Not classified	
Acute t	oxicity (dermal)	: Not classified	
Acute t	oxicity (inhalation)	: Not classified	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Barium Zirconate (12009-21-1)	
LD50 oral rat	1980 mg/kg
LD50 dermal rat	N/A
LC50 inhalation rat (ppm)	N/A
LC50 inhalation rat (Dust/Mist - mg/l/4h)	N/A mg/l/4h
LC50 inhalation rat (Vapours - mg/l/4h)	N/A mg/l/4h
Skin corrosion/irritation	: Causes skin irritation.
	pH: 10
Serious eye damage/irritation	: Causes serious eye irritation.
	pH: 10
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.
Barium Zirconate (12009-21-1)	
LOAEL (oral, rat)	N/A mg/kg bodyweight
STOT-repeated exposure	: Not classified
Barium Zirconate (12009-21-1)	
LOAEL (oral, rat, 90 days)	N/A mg/kg bodyweight/day
Aspiration hazard	: Not classified

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.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified
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.		
.4. Mobility in soil			
No additional information available			
2.5. Results of PBT and vPvB assessment			
No additional information available			
12.6. 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 / RID / IMDG / IATA / ADN

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

5.5.5	a) with its amendment Regulation (EO) 2013/630
14.1. UN 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
ΙΑΤΑ	
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. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

according to Regulation (EC) No. 1907/2000 (REACT) V	
SECTION 15: Regulatory informatio	n
15.1. Safety, health and environmental re	egulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations	
Contains no REACH substances with Annex XV	/II restrictions
Contains no substance on the REACH candidat	te list
Contains no REACH Annex XIV substances	
15.1.2. National regulations	
Germany	
VwVwS Annex reference	: Water hazard class (WGK) 3, severe hazard to waters (Classification according to VwVwS, Annex 4)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BlmSchV (Hazardous Incident Ordinance)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: Portland Cement is listed
SZW-lijst van mutagene stoffen	: Portland Cement is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are listed
Denmark	
Recommendations Danish Regulation	: Young people below the age of 18 years are not allowed to use the product
15.2. Chemical safety assessment	

No chemical safety assessment has been carried out

SECTION 16: Other information

Revision date : 08/01/2018 Full text of H- and FLIH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation

SDS EU (REACH Annex II)

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