

TheraCem Catalyst Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 06/25/2018 Version: 2.0

SECTION 1: Identification	
1.1. Identification	
Product form	: Mixture
Product name	: TheraCem Catalyst
1.2. Recommended use and r	·
Use of the substance/mixture	: For Rx Only
1.3. Supplier	
Manufacturer Bisco, Inc. 1100 W. Irving Park Rd. Schaumburg, IL 60193 T 847.534.6000 - F 847.891.5049 sales@bisco.com - www.bisco.com	
1.4. Emergency telephone nu	nber
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: Hazard(s) ident	ification
2.1. Classification of the subs	tance or mixture
GHS-US classification	
Skin corrosion/irritation H315	Causes skin irritation
Category 2 Serious eye damage/eye H319 irritation Category 2	Causes serious eye irritation
Skin sensitization, Category H317	May cause an allergic skin reaction
Hazardous to the aquatic H402 environment - Acute Hazard Category 3 Full text of H statements : see section	Harmful to aquatic life
2.2. GHS Label elements, incl	uding precautionary statements
GHS-US labeling	
Hazard pictograms (GHS-US)	
Hazard statements (GHS-US)	: H315 - Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H402 - Harmful to aquatic life
Precautionary statements (GHS-US)	 P261 - Avoid breathing vapors P264 - Wash hands thoroughly after handling P272 - Contaminated work clothing must not be allowed out of the workplace P273 - Avoid release to the environment P280 - Wear eye protection, face protection, protective gloves P302+P352 - If on skin: Wash with plenty of Wash skin with soap and water P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P321 - Specific treatment (see First aid measures on this label) P332+P313 - If skin irritation 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 P363 - Wash contaminated clothing before reuse P501 - Dispose in a safe manner in accordance with local/national regulations

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2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
10-Methacryloyloxydecyl Dihydrogen Phosphate	(CAS-No.) 85590-00-7	10 - 30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
2-Hydroxyethyl Methacrylate	(CAS-No.) 868-77-9	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Tert-butyl Perbenzoate	(CAS-No.) 614-45-9	1 - 5	Self-react. D, H242 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400

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

4.1. Description of first aid measures First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. First-aid measures after inhalation : 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 : Wish skin with plenty of 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 skin contact : Irritation. May cause an allergic skin reaction. Symptoms/effects after eye contact : Eye irritation. 4.3. Immediate medical attention and special treatment, if necessary Treat symptomatically. : Sectific hazards arising from the chemical Suitable (and unsuitable) extinguishing media : Water spray. Dry powder. Foam. S.1. Suitable (and unsuitable) extinguishing media Suitable (and unsuitable) extinguishing media : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective equipment. Self-contained breathing apparatus. Complete protective equipment. Self-contained breathing apparatus. Comp	SECTION 4: First-aid measures	
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin inritation 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 inritation 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 (actue and delayed) Symptoms/effects after eye contact : Irritation. May cause an allergic skin reaction. Symptoms/effects after eye contact : Eye irritation. 4.3. Immediate medical attention and special treatment, if necessary Treat symptomatically. Eye irritation for persite. 5.1. Suitable (and unsuitable) extinguishing media Suitable extinguishing media : Water spray. Dry powder. Foam. 5.2. Specific hazards arising from the chemical Reactivity : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Special protective equipment and emergency procedures Entry of	4.1. Description of first aid measures	
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6.3. Methods and material for containment and cleaning up Methods for cleaning up : Mechanically recover the product.	6.2. Environmental precautions	
Methods for cleaning up : Mechanically recover the product.	Avoid release to the environment.	
	6.3. Methods and material for containmer	it and cleaning up
Other information : Dispose of materials or solid residues at an authorized site.	Methods for cleaning up	: Mechanically recover the product.
	Other information	: Dispose of materials or solid residues at an authorized site.

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6.4. Reference to other sections	
For further information refer to section 13	3.
SECTION 7: Handling and stor	rage
7.1. Precautions for safe handlin	g
Precautions for safe handling	Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing mist, vapors.
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 cool.
SECTION & Exposure control	c/personal protection
SECTION 8: Exposure controls	
8.1. Control parameters	
10-Methacryloyloxydecyl Dihydroge	n Phosphate (85590-00-7)
Not applicable	
Tert-butyl Perbenzoate (614-45-9)	
Not applicable	
2-Hydroxyethyl Methacrylate (868-77	·-9)
Not applicable	
8.2. Appropriate engineering cor	
Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.
8.3. Individual protection measu	res/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	
Physical state	: Solid	
Appearance	: Viscous resin paste.	
Color	: White opaque	
Odor	: Acrylic	
Odor threshold	: No data available	
рН	: No data available	
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.	
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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 pro	duct 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 dan	gerous reactions known under normal conditions of use.	
10.4.	Conditions to avoid	
None u	nder recommended storage and handling conditions (see section 7).	
10.5.	Incompatible materials	
No add	itional 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

10-Methacryloyloxydecyl Dihydrogen Phosphate (85590-00-7)		
LD50 oral rat	> > mg/kg	
Tert-butyl Perbenzoate (614-45-9)		
LD50 oral rat	> 2000 mg/kg (Rat)	
LD50 dermal rat	> 2000 mg/kg (Rat)	
LC50 inhalation rat (mg/l)	> 20 mg/l/4h (Rat)	
2-Hydroxyethyl Methacrylate (868-77-9)		
LD50 oral rat	5564 mg/kg body weight (Rat; Experimental value)	
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Experimental value)	
ATE US (oral)	5564 mg/kg body weight	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitization	: May cause an allergic skin reaction.	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
10-Methacryloyloxydecyl Dihydrogen Phosph	nate (85590-00-7)	
IARC group	4 - Probably not carcinogenic to humans	
Reproductive toxicity	: Not classified	
Specific target organ toxicity – single exposure	: Not classified	
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Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after skin contact Symptoms/effects after eye contact	Irritation. May cause an allergic skin reaction.Eye irritation.

SECTION 12: Ecological information

12.1. Toxicity Ecology - general

: Harmful to aquatic life.

10-Methacryloyloxydecyl Dihydrogen Phosphate (85590-00-7)		
EC50 Daphnia 1	> mg/l	
NOEC chronic fish	48h 10 mg/l	
2-Hydroxyethyl Methacrylate (868	-77-9)	
LC50 fish 1	227 mg/l (LC50; 96 h)	
EC50 Daphnia 1	171 mg/l (NOEC; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)	
EC50 Daphnia 2	380 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)	
Threshold limit algae 1	836 mg/l (ErC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)	
Threshold limit algae 2	345 mg/l (EbC50; OECD 201: Alga, Growth Inhibition Test; 72 h; Pseudokirchneriella subcapitata; Static system; Fresh water; Experimental value)	

12.2. Persistence and degradability

Tert-butyl Perbenzoate (614-45-9)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.14 g O₂/g substance
2-Hydroxyethyl Methacrylate (868-77-9)	

12.3. Bioaccumulative potential

Tert-butyl Perbenzoate (614-45-9)		
Bioaccumulative potential	No bioaccumulation data available.	
2-Hydroxyethyl Methacrylate (868-77-9)		
BCF fish 1	1.3 - 1.5 (BCF)	
Log Pow	-0.55 - 0.49 (0.42; Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	

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.		

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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not applicable

TDG

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

2-Hydroxyethyl Methacrylate (868-77-9)

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:06/06/2018

Full text of H-phrases:

H242	Heating may cause a fire
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H402	Harmful to aquatic life

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