

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 6/13/2023 Supersedes: 4/30/2018 Version: 2.0

SECTION 1: Identification		
1.1. Identification		
	: Mixture : TheraCem Ca Catalyst	
1.2. Recommended use and restrictions on u	use	
Use of the substance/mixture	: For Rx Only	
1.3. Supplier		
Manufacturer BISCO, Inc. 1100 W. Irving Park Rd. Schaumburg, IL , 60193 U.S.A. T 1-800-247-3368 or 1-847-534-6000 sales@bisco.com - www.bisco.com		
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: Hazard(s) identification		
2.1. Classification of the substance or mixtu	ire	
GHS US classification		
Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2 Skin sensitization, Category 1 Specific target organ toxicity - Single exposure, Categ Respiratory tract irritation Full text of H statements : see section 16	H315 Causes skin irritation H319 Causes serious eye irritation H317 May cause an allergic skin reaction gory 3, H335 May cause respiratory irritation	
2.2. GHS Label elements, including precaution	ionary statements	
GHS US labeling		
Hazard pictograms (GHS US)		
Signal word (GHS US) Hazard statements (GHS US)	 Warning H315 - Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H335 - May cause respiratory irritation 	
Precautionary statements (GHS US)	 H335 - May cause respiratory irritation P261 - Avoid breathing dust, fume, vapors. P264 - Wash hands thoroughly after handling P272 - Contaminated work clothing must not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection P302+P352 - If on skin: Wash with plenty of water and soap P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. 	

Safety Data Sheet

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

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.
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.
P501 - Dispose in a safe manner in accordance with local/national regulations

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

Name	Product identifier	%	GHS US classification
Glass Filler	CAS-No.: N/A	50 - 75	Eye Irrit. 2, H319 STOT SE 3, H335
10-Methacryloyloxydecyl Dihydrogen Phosphate	CAS-No.: 85590-00-7	10 - 30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Triethylene Glycol Dimethacrylate	CAS-No.: 109-16-0	10 - 30	Skin Sens. 1B, H317
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	Org. Perox. C, H242 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Triethylamine	CAS-No.: 121-44-8	< 1	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314
2,6-Di-Tert-Butyl-4-Methylphenol	CAS-No.: 128-37-0	< 1	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

Safety Data Sheet

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

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 or · 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 skin contact : Irritation. May cause an allergic skin reaction. Symptoms/effects after eye contact : May cause 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	g media	
Suitable extinguishing media	: Water spray. Dry powder. Foam.	
5.2. Specific hazards arising from the chemical		
Hazardous decomposition products in case of fire	: Toxic fumes may be released.	
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 equi	pment and emergency procedures	
6.1.1. For non-emergency personnel		
Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust, fume, vapors.	
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.

Safety Data Sheet

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

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid breathing dust, fume, 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 a	ny incompatibilities	
Storage conditions	: Store in a well-ventilated place. Keep container tightly closed. Keep cool.	
SECTION 8: Exposure controls/persona	Il protection	
8.1. Control parameters		
No additional information available		
8.2. Appropriate engineering controls		
Appropriate engineering controls Environmental exposure controls	Ensure good ventilation of the work station.Avoid release to the environment.	
8.3. Individual protection measures/Persona	al 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 respin	ratory equipment	
Personal protective equipment symbol(s):		

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

Safety Data Sheet

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

Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20°C Relative density Solubility Partition coefficient n-octanol/water (Log Pow) Auto-ignition temperature Decomposition temperature Viscosity, kinematic Viscosity, dynamic Explosion limits Explosive properties	 Not applicable No data available Not applicable No data available No flammable. No data available No data available Not applicable No data available No data available No data available Not applicable
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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 (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified : Not classified : Not classified	
Tert-butyl Perbenzoate (614-45-9)		
LD50 oral rat	1012 mg/kg	

Safety Data Sheet

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

ATE US (gases)4500 ppmV/4hATE US (vapors)11 mg/l/4hATE US (vapors)11 mg/l/4hATE US (dust, mist)1.5 mg/l/4h 2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0) LD50 oral rat> 6000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rat> 2000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rat> 2000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rat> 2000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rat> 2000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rat> 2000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rat> 2000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rat> 2000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rat> 2000 mg/kg SourceLC50 Inhalation - Rat (Dust/Mist)> 2 mg/l Source: OS 2-Hydroxyethyl Methacrylate (868-77-9)	weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental s)) weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) e: ECHA HRI GLP toxicity test eight (Rat, Experimental value, Oral)		
ATE US (vapors)11 mg/l/4hATE US (dust, mist)1.5 mg/l/4h 2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0) LD50 oral rat> 6000 mg/kg body value, Oral, 14 day(strained body of the strained body	s)) weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) e: ECHA HRI GLP toxicity test eight (Rat, Experimental value, Oral)		
ATE US (dust, mist) 1.5 mg/l/4h 2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0) LD50 oral rat > 6000 mg/kg body w value, Oral, 14 day(s) > 2000 mg/kg body w LD50 dermal rat > 2000 mg/kg Source LC50 Inhalation - Rat (Dust/Mist) > 2 mg/l Source: OS 2-Hydroxyethyl Methacrylate (868-77-9)	s)) weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) e: ECHA HRI GLP toxicity test sight (Rat, Experimental value, Oral)		
2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)LD50 oral rat> 6000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rat> 2000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rabbit> 2000 mg/kg body w value, Oral, 14 day(s)LC50 Inhalation - Rat (Dust/Mist)> 2 mg/l Source: OS2-Hydroxyethyl Methacrylate (868-77-9)	s)) weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) e: ECHA HRI GLP toxicity test sight (Rat, Experimental value, Oral)		
LD50 oral rat> 6000 mg/kg body w value, Oral, 14 day(s)LD50 dermal rat> 2000 mg/kg body w LD50 dermal rabbitLD50 dermal rabbit> 2000 mg/kg SourceLC50 Inhalation - Rat (Dust/Mist)> 2 mg/l Source: OS2-Hydroxyethyl Methacrylate (868-77-9)	s)) weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) e: ECHA HRI GLP toxicity test sight (Rat, Experimental value, Oral)		
value, Oral, 14 day(s LD50 dermal rat > 2000 mg/kg body v LD50 dermal rabbit > 2000 mg/kg Source LC50 Inhalation - Rat (Dust/Mist) > 2 mg/l Source: OS 2-Hydroxyethyl Methacrylate (868-77-9)	s)) weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) e: ECHA HRI GLP toxicity test sight (Rat, Experimental value, Oral)		
LD50 dermal rabbit > 2000 mg/kg Source LC50 Inhalation - Rat (Dust/Mist) > 2 mg/l Source: OS 2-Hydroxyethyl Methacrylate (868-77-9)	e: ECHA HRI GLP toxicity test sight (Rat, Experimental value, Oral)		
LC50 Inhalation - Rat (Dust/Mist) > 2 mg/l Source: OS 2-Hydroxyethyl Methacrylate (868-77-9)	HRI GLP toxicity test eight (Rat, Experimental value, Oral)		
2-Hydroxyethyl Methacrylate (868-77-9)	eight (Rat, Experimental value, Oral)		
	• • • • • •		
	• • • •		
LD50 oral rat 5564 mg/kg body we			
LD50 dermal rabbit > 5000 mg/kg (24 h,	Rabbit, Male, Experimental value, Dermal)		
ATE US (oral) 5564 mg/kg body we	sight		
Triethylamine (121-44-8)			
LD50 oral rat 730 mg/kg Source: E	ECHA		
LD50 dermal rabbit 580 mg/kg Source: E	ECHA		
	8.1150: Acute inhalation toxicity, 4 h, Rat, Male / female, Experimental lue, Inhalation (vapours), 14 day(s))		
LC50 Inhalation - Rat [ppm] 3496 ppm Source: E	СНА		
ATE US (oral) 500 mg/kg body weig	ght		
ATE US (dermal) 1100 mg/kg body we	sight		
ATE US (gases) 4500 ppmV/4h			
ATE US (vapors) 11 mg/l/4h			
ATE US (dust, mist) 1.5 mg/l/4h			
Triethylene Glycol Dimethacrylate (109-16-0)			
LD50 oral rat 10837 mg/kg Source	E: NLM,THOMSON		
LD50 dermal > 2000 mg/kg body v day(s))	weight (US EPA, 14 day(s), Mouse, Male, Experimental value, Skin, 14		
ATE US (oral) 10837 mg/kg body w	<i>r</i> eight		
Skin corrosion/irritation : Causes skin irritation.			
Tert-butyl Perbenzoate (614-45-9)	Tert-butyl Perbenzoate (614-45-9)		
pH No data available in	the literature		
2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)			
pH No data available in			

Safety Data Sheet

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

2-Hydroxyethyl Methacrylate (868-77-9)		
рН	No data available in the literature	
Triethylamine (121-44-8)		
рН	12.5 Source: ECHA	
Triethylene Glycol Dimethacrylate (109-1	6-0)	
рН	6.8 - 7.2	
Serious eye damage/irritation :	Causes serious eye irritation.	
Tert-butyl Perbenzoate (614-45-9)		
рН	No data available in the literature	
2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)		
рН	No data available in the literature	
2-Hydroxyethyl Methacrylate (868-77-9)		
рН	No data available in the literature	
Triethylamine (121-44-8)		
рН	12.5 Source: ECHA	
Triethylene Glycol Dimethacrylate (109-1	6-0)	
рН	6.8 - 7.2	
	May cause an allergic skin reaction.	
0, 1	Not classified	
Carcinogenicity : 2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)	Not classified	
NOAEL (chronic, oral, animal/male, 2 years)	25 mg/kg body weight Animal: rat, Animal sex: male, Remarks on results: other:	
IARC group	3 - Not classifiable	
Triethylene Glycol Dimethacrylate (109-1	4 - Probably not carcinogenic to humans	
IARC group Reproductive toxicity :	A - Probably not carcinogenic to numans	
	May cause respiratory irritation.	
10-Methacryloyloxydecyl Dihydrogen Phosphate (85590-00-7)		
STOT-single exposure	May cause respiratory irritation.	
Glass Filler (N/A)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure :	Not classified	
Tert-butyl Perbenzoate (614-45-9)		
NOAEL (oral,rat,90 days)	≈ 30 mg/kg body weight Animal: rat, Guideline: other:	
Triethylamine (121-44-8)		
LOAEC (inhalation,rat,dust/mist/fume,90 days)	1.02 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90- Day Study), Guideline: OECD Guideline 452 (Chronic Toxicity Studies)	

Safety Data Sheet

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

Triethylene Glycol Dimethacrylate (109-16-0)		
LOAEC (inhalation,rat,gas,90 days)	350 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Remarks on results: other:	
NOAEL (oral,rat,90 days)	1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)	
NOAEC (inhalation,rat,gas,90 days)	100 ppm Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study), Remarks on results: other:	
	Not classified Not applicable	
Tert-butyl Perbenzoate (614-45-9)		
Viscosity, kinematic	No data available in the literature	
2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)		
Viscosity, kinematic	3.47 mm²/s (0 °C, ASTM D445: Capillary viscometer)	
2-Hydroxyethyl Methacrylate (868-77-9)		
Viscosity, kinematic	6.4 mm²/s (20 °C)	
Triethylamine (121-44-8)		
Viscosity, kinematic	No data available in the literature	
	Irritation. May cause an allergic skin reaction. May cause eye irritation.	

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general :	Harmful to aquatic life.	
10-Methacryloyloxydecyl Dihydrogen Phosphate (85590-00-7)		
NOEC chronic fish	48h 10 mg/l	
Tert-butyl Perbenzoate (614-45-9)		
LC50 - Fish [1]	1.6 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	11 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	0.8 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 72h - Algae [2]	0.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
ErC50 algae	0.8 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)	
2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)		
LC50 - Fish [1]	> 0.57 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)	
EC50 - Crustacea [1]	0.48 mg/l Test organisms (species): Daphnia magna	
LC50 - Fish [2]	0.199 mg/l (LC50; ECOSAR v1.00; 96 h; Pisces)	
EC50 - Crustacea [2]	0.15 mg/l (NOEC; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)	

Safety Data Sheet

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

2,6-Di-Tert-Butyl-4-Methylphenol (128-	2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)		
EC50 72h - Algae [1]	> 0.4 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
NOEC (chronic)	0.023 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
2-Hydroxyethyl Methacrylate (868-77-9)		
LC50 - Fish [1]	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oryzias latipes, Semi-static system, Fresh water, Experimental value, GLP)		
EC50 - Crustacea [1]	380 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)		
ErC50 algae	836 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)		
Triethylamine (121-44-8)			
LC50 - Fish [1]	24 mg/l Source: ECHA		
EC50 72h - Algae [1]	8 mg/l Source: ECHA		
EC50 72h - Algae [2]	6.8 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)		
LOEC (chronic)	14 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'		
NOEC (chronic)	7.1 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'		
Triethylene Glycol Dimethacrylate (109-16-0)			
LC50 - Fish [1]	16.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)		
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)		
EC50 72h - Algae [2]	72.8 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)		
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)		
LOEC (chronic)	100 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		
NOEC (chronic)	32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'		

12.2. Persistence and degradability

Tert-butyl Perbenzoate (614-45-9)	
Persistence and degradability	Readily biodegradable in water.
ThOD	2.14 g O□/g substance
2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.51 g O⊡/g substance
Chemical oxygen demand (COD)	2.27 g O□/g substance
ThOD	2.977 g O□/g substance
BOD (% of ThOD)	0.17

Safety Data Sheet

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

Tert-butyl Perbenzoate (614-45-9) Partition coefficient n-octanol/water (Log Pow) 3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4). 2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0) Partition coefficient n-octanol/water (Log Pow) 4.17 (Experimental value, 37 °C) Bioaccumulative potential Bioaccumulative potential Potential for bioaccumulation (4 ≤ Log Kow ≤ 5). 2-Hydroxyethyl Methacrylate (868-77-9) Partition coefficient n-octanol/water (Log Pow) 0.42 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) Bioaccumulative potential Not bioaccumulative. Triethylamine (121-44-8) Flash			
Triethylamine (121-44-8) Persistence and degradability Readily biodegradable in water. Biochemical oxygen demand (BOD) < 0.01 g O:::/g substance	2-Hydroxyethyl Methacrylate (868-77-9)		
Persistence and degradability Readily biodegradable in water. Biochemical oxygen demand (BOD) < 0.001 g O∷/g substance	Persistence and degradability	Biodegradability in soil: no data available. Readily biodegradable in water.	
Biochemical oxygen demand (BOD) < 0.001 g O⊡/g substance	Triethylamine (121-44-8)		
Chemical oxygen demand (COD) 1.02 g OC/g substance Triethylene Glycol Dimethacrylate (109-16-0) Persistence and degradability Readily biodegradable in water. 12.3. Bioaccumulative potential Triethylene Colored (614-45-9) Partition coefficient n-octanol/water (Log Pow) 3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).	Persistence and degradability	Readily biodegradable in water.	
Triethylene Glycol Dimethacrylate (109-16-0) Persistence and degradability Readily biodegradable in water. 12.3. Bioaccumulative potential Tert-butyl Perbenzoate (614-45-9) Partition coefficient n-octanol/water (Log Pow) 3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).	Biochemical oxygen demand (BOD)	< 0.001 g O⊡/g substance	
Persistence and degradability Readily biodegradable in water. 12.3. Bioaccumulative potential Tert-butyl Perbenzoate (614-45-9) Partition coefficient n-octanol/water (Log Pow) 3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).	Chemical oxygen demand (COD)	1.02 g O⊡/g substance	
12.3. Bioaccumulative potential Tert-butyl Perbenzoate (614-45-9) Partition coefficient n-octanol/water (Log Pow) 3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).	Triethylene Glycol Dimethacrylate (109-1	6-0)	
Tert-butyl Perbenzoate (614-45-9) Partition coefficient n-octanol/water (Log Pow) 3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C) Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).	Persistence and degradability	Readily biodegradable in water.	
Partition coefficient n-octanol/water (Log Pow) 3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).	12.3. Bioaccumulative potential		
*C) Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).	Tert-butyl Perbenzoate (614-45-9)		
2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0) Partition coefficient n-octanol/water (Log Pow) 4.17 (Experimental value, 37 °C) Bioaccumulative potential Potential for bioaccumulation (4 ≤ Log Kow ≤ 5). 2-Hydroxyethyl Methacrylate (868-77-9) Partition coefficient n-octanol/water (Log Pow) 0.42 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) Bioaccumulative potential Not bioaccumulative. Triethylamine (121-44-8) S BCF - Fish [1] < 0.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Fresh water, Experimental value)	Partition coefficient n-octanol/water (Log Pow)		
Partition coefficient n-octanol/water (Log Pow) 4.17 (Experimental value, 37 °C) Bioaccumulative potential Potential for bioaccumulation (4 ≤ Log Kow ≤ 5). 2-Hydroxyethyl Methacrylate (868-77-9) Partition coefficient n-octanol/water (Log Pow) 0.42 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) Bioaccumulative potential Not bioaccumulative. Triethylamine (121-44-8) BCF - Fish [1] < 0.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Frest water, Experimental value)	Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
Bioaccumulative potential Potential for bioaccumulation (4 ≤ Log Kow ≤ 5). 2-Hydroxyethyl Methacrylate (868-77-9) Partition coefficient n-octanol/water (Log Pow) 0.42 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) Bioaccumulative potential Not bioaccumulative. Triethylamine (121-44-8) S BCF - Fish [1] < 0.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Frest water, Experimental value)	2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)		
2-Hydroxyethyl Methacrylate (868-77-9) Partition coefficient n-octanol/water (Log Pow) 0.42 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) Bioaccumulative potential Not bioaccumulative. Triethylamine (121-44-8) BCF - Fish [1] < 0.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Fresh water, Experimental value)	Partition coefficient n-octanol/water (Log Pow)	4.17 (Experimental value, 37 °C)	
Partition coefficient n-octanol/water (Log Pow) 0.42 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) Bioaccumulative potential Not bioaccumulative. Triethylamine (121-44-8) Seccomposition (100 - 100 -	Bioaccumulative potential	Potential for bioaccumulation ($4 \le Log \text{ Kow} \le 5$).	
Method, 25 °C) Bioaccumulative potential Not bioaccumulative. Triethylamine (121-44-8) BCF - Fish [1] < 0.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Fresh water, Experimental value)	2-Hydroxyethyl Methacrylate (868-77-9)		
Triethylamine (121-44-8) BCF - Fish [1] < 0.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Fresh water, Experimental value)	Partition coefficient n-octanol/water (Log Pow)		
BCF - Fish [1] < 0.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Fresh water, Experimental value)	Bioaccumulative potential	Not bioaccumulative.	
water, Experimental value) Partition coefficient n-octanol/water (Log Pow) 1.45 (Experimental value) Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).	Triethylamine (121-44-8)		
Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).	BCF - Fish [1]	< 0.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 42 day(s), Cyprinus carpio, Fresh water, Experimental value)	
Triethylene Glycol Dimethacrylate (109-16-0) Partition coefficient n-octanol/water (Log Pow) 2.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)	Partition coefficient n-octanol/water (Log Pow)	1.45 (Experimental value)	
Partition coefficient n-octanol/water (Log Pow) 2.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)	Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
	Triethylene Glycol Dimethacrylate (109-1	6-0)	
Bioaccumulative potential Low potential for bioaccumulation (Log Kow < 4).	Partition coefficient n-octanol/water (Log Pow)	2.3 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method)	
	Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

12.4. Mobility in soil

Tert-butyl Perbenzoate (614-45-9)	
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.3 (log Koc, QSAR, Calculated value)
Ecology - soil	Low potential for adsorption in soil.
2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)	
Surface tension	Not applicable (water solubility < 1 mg/l)

Safety Data Sheet

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

Organic Carbon Normalized Adsorption Coefficient (Log Koc)4.362 (log Koc, SRC PCKOCWIN v1.66, Calculated value)Ecology - soilLow potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation.2-Hydroxyethyl Methacrylate (868-77-9)No data available in the literatureOrganic Carbon Normalized Adsorption Coefficient (Log Koc)No data available in the literatureOrganic Carbon Normalized Adsorption Coefficient (Log Koc)0.164 - 0.708 (log Koc, SRC PCKOCWIN v2.0, Calculated value)Ecology - soilAdsorbs into the soil.Triethylamine (121-44-8)20.05 mN/m (25 °C)Surface tension20.05 mN/m (25 °C)Organic Carbon Normalized Adsorption Coefficient (Log Koc)Low potential for adsorption in soil.Triethylene Glycol Dimethacrylate (Log Koc)1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)Organic Carbon Normalized Adsorption Coefficient (Log Koc)1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	2 6 Di Tart Dutul 4 Mathulahanal (129 27 0)		
(Log Koc) Low potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation. 2-Hydroxyethyl Methacrylate (868-77-9) Surface tension No data available in the literature Organic Carbon Normalized Adsorption Coefficient (Log Koc) 0.164 - 0.708 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Ecology - soil Adsorbs into the soil. Triethylamine (121-44-8) 20.05 mN/m (25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 20.05 mN/m (25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 20.05 mN/m (25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) Low potential for adsorption in soil. Triethylene Glycol Dimethacrylate (109-16-0) 1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)		
2-Hydroxyethyl Methacrylate (868-77-9) Surface tension No data available in the literature Organic Carbon Normalized Adsorption Coefficient (Log Koc) 0.164 - 0.708 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Ecology - soil Adsorbs into the soil. Triethylamine (121-44-8) 20.05 mN/m (25 °C) Surface tension 20.05 mN/m (25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 2.03 (log Koc, SRC PCKOCWIN v1.66, Calculated value) Ecology - soil Low potential for adsorption in soil. Triethylene Glycol Dimethacrylate (109-16-0) 1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)		4.362 (log Koc, SRC PCKOCWIN v1.66, Calculated value)	
Surface tensionNo data available in the literatureOrganic Carbon Normalized Adsorption Coefficient (Log Koc)0.164 - 0.708 (log Koc, SRC PCKOCWIN v2.0, Calculated value)Ecology - soilAdsorbs into the soil.Triethylamine (121-44-8)Surface tension20.05 mN/m (25 °C)Organic Carbon Normalized Adsorption Coefficient (Log Koc)2.03 (log Koc, SRC PCKOCWIN v1.66, Calculated value)Ecology - soilLow potential for adsorption in soil.Triethylene Glycol Dimethacrylate(109-16-0)Organic Carbon Normalized Adsorption Coefficient (Log Koc)1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	Ecology - soil	Low potential for mobility in soil. May be harmful to plant growth, blooming and fruit formation.	
Organic Carbon Normalized Adsorption Coefficient (Log Koc) 0.164 - 0.708 (log Koc, SRC PCKOCWIN v2.0, Calculated value) Ecology - soil Adsorbs into the soil. Triethylamine (121-44-8) 20.05 mN/m (25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 20.05 mN/m (25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 2.03 (log Koc, SRC PCKOCWIN v1.66, Calculated value) Triethylene Glycol Dimethacrylate (109-16-0) Low potential for adsorption in soil. Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	2-Hydroxyethyl Methacrylate (868-77-9)		
(Log Koc) Adsorbs into the soil. Ecology - soil Adsorbs into the soil. Triethylamine (121-44-8) 20.05 mN/m (25 °C) Surface tension 20.05 mN/m (25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 2.03 (log Koc, SRC PCKOCWIN v1.66, Calculated value) Ecology - soil Low potential for adsorption in soil. Triethylene Glycol Dimethacrylate (109-16-0) Organic Carbon Normalized Adsorption Coefficient (Log Koc) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	Surface tension	No data available in the literature	
Triethylamine (121-44-8) Surface tension 20.05 mN/m (25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 2.03 (log Koc, SRC PCKOCWIN v1.66, Calculated value) Ecology - soil Low potential for adsorption in soil. Triethylene Glycol Dimethacrylate (109-16-0) Organic Carbon Normalized Adsorption Coefficient (Log Koc) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.164 - 0.708 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Surface tension 20.05 mN/m (25 °C) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 2.03 (log Koc, SRC PCKOCWIN v1.66, Calculated value) Ecology - soil Low potential for adsorption in soil. Triethylene Glycol Dimethacrylate (109-16-0) Organic Carbon Normalized Adsorption Coefficient (Log Koc) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	Ecology - soil	Adsorbs into the soil.	
Organic Carbon Normalized Adsorption Coefficient (Log Koc) 2.03 (log Koc, SRC PCKOCWIN v1.66, Calculated value) Ecology - soil Low potential for adsorption in soil. Triethylene Glycol Dimethacrylate (109-16-0) (109-16-0) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	Triethylamine (121-44-8)		
(Log Koc) Low potential for adsorption in soil. Ecology - soil Low potential for adsorption in soil. Triethylene Glycol Dimethacrylate (109-16-0) Organic Carbon Normalized Adsorption Coefficient (Log Koc)	Surface tension	20.05 mN/m (25 °C)	
Triethylene Glycol Dimethacrylate (109-16-0) Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	5	2.03 (log Koc, SRC PCKOCWIN v1.66, Calculated value)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc) 1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	Ecology - soil	Low potential for adsorption in soil.	
(Log Koc)	Triethylene Glycol Dimethacrylate (109-16-0)		
Ecology - soil Highly mobile in soil.		1.89 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
	Ecology - soil	Highly mobile in soil.	

12.5. Other adverse effects

No additional information available

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

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) Proper Shipping Name (TDG) Proper Shipping Name (IMDG) Proper Shipping Name (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.3. Transport hazard class(es)	

DOT

Transport hazard class(es) (DOT)

: Not applicable

Safety Data Sheet

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

TDG	- Mad and Kashin
Transport hazard class(es) (TDG)	: Not applicable
IMDG Transport hazard class(es) (IMDG)	: Not applicable
IATA Transport hazard class(es) (IATA)	: Not applicable
14.4. Packing group	
Packing group (DOT) Packing group (TDG) Packing group (IMDG) Packing group (IATA)	 Not applicable Not applicable Not applicable Not applicable
14.5. Environmental hazards	
Other information	: No supplementary information available.
14.6. Special precautions for user	
DOT No data available	
TDG No data available	
IMDG No data available	
IATA No data available	
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	
Not applicable	

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:		
10-Methacryloyloxydecyl Dihydrogen Phosphate	CAS-No. 85590-00-7	10 - 30%
Glass Filler	CAS-No. N/A	50 - 75%

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.			
Triethylamine	CAS-No. 121-44-8	< 1%	

Triethylamine (121-44-8)		
Listed on EPA Hazardous Air Pollutant (HAPS)		
CERCLA RQ	5000 lb	

Safety Data Sheet

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

15.2. International regulations

CANADA

10-Methacryloyloxydecyl Dihydrogen Phosphate (85590-00-7)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

Tert-butyl Perbenzoate (614-45-9)

Listed on the Canadian DSL (Domestic Substances List)

2,6-Di-Tert-Butyl-4-Methylphenol (128-37-0)

Listed on the Canadian DSL (Domestic Substances List)

2-Hydroxyethyl Methacrylate (868-77-9)

Listed on the Canadian DSL (Domestic Substances List)

Triethylamine (121-44-8)

Listed on the Canadian DSL (Domestic Substances List)

Triethylene Glycol Dimethacrylate	(109-16-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Tert-butyl Perbenzoate(614-45-9)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
2,6-Di-Tert-Butyl-4-Methylphenol(128-37-0)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List
Triethylamine(121-44-8)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date : 06/13/2023

Full text of H-phrases		
H225	Highly flammable liquid and vapor	

Safety Data Sheet

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

Full text of H-phrases			
H242	Heating may cause a fire.		
H302	Harmful if swallowed		
H312	Harmful in contact with skin		
H314	Causes severe skin burns and eye damage		
H315	Causes skin irritation		
H317	May cause an allergic skin reaction		
H319	Causes serious eye irritation		
H332	Harmful if inhaled		
H335	May cause respiratory irritation		
H400	Very toxic to aquatic life		
H410	Very toxic to aquatic life with long lasting effects		
H412	Harmful to aquatic life with long lasting effects		

Indication of changes:				
Section	Changed item	Change	Comments	
	Revision date	Added		
	Precautionary statements (GHS US)	Modified		
	Hazard statements (GHS US)	Modified		
	Signal word (GHS US)	Added		
	Issue date	Removed		
	Supersedes	Added		
2.1	GHS-US classification	Modified		
3	Composition/Information on ingredients	Modified		

Safety Data Sheet (SDS), USA

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.