SAFETY DATA SHEETS

This SDS packet was issued with item:

071415652

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

071379304 071379312



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 07 July 2021 Revision date: 07 July 2021 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Trade name : Predicta Cement - Base Component

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Bioactive Self-Adhesive Cement

1.3. Supplier

Parkell Inc. 300 Executive Drive Edgewood, NY 11717

T (631) 249-1134

1.4. Emergency telephone number

Emergency number : INFOTRAC 1-800-535-5053

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral), Category 4 Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2

Skin sensitisation, Category 1 Reproductive toxicity, Category 1B Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May damage fertility or the unborn child.

Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation May cause respiratory irritation.

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)

Precautionary statements (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : Harmful if swallowed.

Causes skin irritation.

May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.

May damage fertility or the unborn child.

: Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Avoid breathing mist, spray.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear eye protection, protective clothing, protective gloves.

If swallowed: Call a doctor, a POISON CENTER if you feel unwell.

If on skin: Wash with plenty of water.

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If inhaled: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a doctor, a POISON CENTER if you feel unwell.

Rinse mouth.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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
Bicyclo[2.2.1]heptane-2,3-dione, 1,7,7-trimethyl-, (.+)-	CAS-No.: 10373-78-1	0 – 25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester	CAS-No.: 6606-59-3	5 – 15	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester	CAS-No.: 1565-94-2	5 – 15	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
N,N-Dimethylaminoethyl methacrylate	CAS-No.: 2867-47-2	0 – 15	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)-	CAS-No.: 162881-26- 7	1 – 15	Skin Sens. 1A, H317
Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega[(2-methyl-1-oxo-2-propenyl)oxy]-	CAS-No.: 41637-38-1	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT SE 3, H335
2-Hydroxyethyl methacrylate (HEMA)	CAS-No.: 868-77-9	0 – 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
Benzoic acid, 4-(dimethylamino)-, ethyl ester	CAS-No.: 10287-53-3	0 – 10	Repr. 1B, H360

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

Name	Product identifier	%	GHS US classification
Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide	CAS-No.: 75980-60-8	0 – 10	Repr. 2, H361
Thiourea, 2-propenyl-	CAS-No.: 109-57-9	1 – 5	Acute Tox. 3 (Oral), H301
2-Hydroxy-4-methoxybenzophenone	CAS-No.: 131-57-7	0 – 5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.

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 : Rinse immediately with plenty of water for 15 minutes. Take off contaminated clothing. If skin

irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 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 : Rinse mouth. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May damage fertility or the unborn child.

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.

Symptoms/effects after ingestion : Harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : On combustion forms: Carbon oxides (CO, CO2). Toxic fumes may be released.

Explosion hazard : None known.

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

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection. Do

not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment. For further information refer to section 8:

"Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective

equipment may intervene. Avoid breathing mist, spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. Equip cleanup crew with

proper protection. For further information refer to section 8: "Exposure controls/personal

protection".

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Mechanically recover the product. On land, sweep or shovel into suitable containers. Store away

from other materials. Notify authorities if product enters sewers or public waters.

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

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13: "Disposal considerations"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Obtain special

instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Use only outdoors or in a well-ventilated area.

Avoid breathing spray, mist. Avoid contact with skin and eyes.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Separate working clothes from town clothes. Launder separately. 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 : Keep container tightly closed in a cool, well-ventilated place. Keep container closed when not in

use. Store locked up.

Incompatible materials : Strong acids.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Predicta Cement - Base Component

No additional information available

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2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)

No additional information available

Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-(41637-38-1)

No additional information available

2-Hydroxyethyl methacrylate (HEMA) (868-77-9)

No additional information available

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (1565-94-2)

No additional information available

Thiourea, 2-propenyl- (109-57-9)

No additional information available

N,N-Dimethylaminoethyl methacrylate (2867-47-2)

No additional information available

Bicyclo[2.2.1]heptane-2,3-dione, 1,7,7-trimethyl-, (.+-.)- (10373-78-1)

No additional information available

Benzoic acid, 4-(dimethylamino)-, ethyl ester (10287-53-3)

No additional information available

Diphenyl-2,4,6-trimethylbenzoyl phosphine oxide (75980-60-8)

No additional information available

Phosphine oxide, phenylbis(2,4,6-trimethylbenzoyl)- (162881-26-7)

No additional information available

2-Hydroxy-4-methoxybenzophenone (131-57-7)

No additional information available

8.2. Appropriate engineering controls

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

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Impermeable protective gloves.

Eye protection:

Chemical goggles or safety glasses.

Skin and body protection:

Long sleeved protective clothing

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Respiratory protection:

An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid Appearance Paste. Colour Colourless Odour Characteristic Odour threshold : No data available рΗ : No data available Melting point : No data available Freezing point : Not applicable Boiling point : No data available Flash point Not applicable Relative evaporation rate (butylacetate=1) No data available Flammability (solid, gas) Non flammable. No data available Vapour pressure Relative vapour density at 20 °C No data available : No data available Relative density Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature : Not applicable Decomposition temperature : No data available Viscosity, kinematic : Not applicable Viscosity, dynamic No data available **Explosive limits** Not applicable Explosive properties No data available Oxidising 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

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Hazardous polymerization will not occur.

10.4. Conditions to avoid

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

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10.5. Incompatible materials

Strong acids.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

1	1	.1	Inf	for	ma	tion	on	toxico	logi	cal	effects
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Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met) Acute toxicity (inhalation) Not classified (Rased on available data, the classification criteria are not met)

Acute toxicity (inhalation)	Not classified (Based on available data, the classification criteria are not met)		
Predicta Cement - Base Component			
ATE US (oral)	1250 mg/kg bodyweight		
2-Hydroxyethyl methacrylate (HEMA) (868-77-	9)		
LD50 dermal rabbit	3000 mg/kg		
Thiourea, 2-propenyl- (109-57-9)			
ATE US (oral)	100 mg/kg bodyweight		
N,N-Dimethylaminoethyl methacrylate (2867-4	7-2)		
LD50 oral rat	> 2000 mg/kg		
LD50 dermal rat	> 2000 mg/kg		
LD50 dermal rabbit	> 3000 mg/kg		
LC50 Inhalation - Rat	0.62 mg/l/4h		
Benzoic acid, 4-(dimethylamino)-, ethyl ester	(10287-53-3)		
LD50 dermal rat	> 2000 mg/kg		
Diphenyl-2,4,6-trimethylbenzoyl phosphine ox	kide (75980-60-8)		
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)		
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: of 12 Nosan No. 8147		
2-Hydroxy-4-methoxybenzophenone (131-57-	7)		
LD50 oral rat	> 12.8 g/kg		

LD50 oral rat	> 12.8 g/kg
LD50 dermal rabbit	> 16 g/kg

Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation : Causes serious eye irritation. Respiratory or skin sensitisation : May cause an allergic skin reaction.

: Not classified (Based on available data, the classification criteria are not met) Germ cell mutagenicity Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Reproductive toxicity May damage fertility or the unborn child.

STOT-single exposure : May cause respiratory irritation.

2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)

STOT-single exposure May cause respiratory irritation.

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oly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega[(2-methyl-1-oxo-2-propenyl)ox 41637-38-1)		
May cause respiratory irritation.		
yl-, (.+)- (10373-78-1)		
May cause respiratory irritation.		
7)		
May cause respiratory irritation.		
Not classified (Based on available data, the classification criteria are not met)		
-9)		
< 30 mg/kg bodyweight/day OECD 422.		
Not classified (Based on available data, the classification criteria are not met) Not applicable May damage fertility or the unborn child. May cause respiratory irritation. Irritation. May cause an allergic skin reaction. Eye irritation. Harmful if swallowed. Likely routes of exposure: ingestion, inhalation, skin and eye.		

SECTION 12: Ecological information

12.1. Toxicity

-Hydroxyethyl methacrylate (HEMA) (868-77-9)				
LC50 - Fish [2]	227 mg/l 96 hours			
ErC50 algae	836 mg/l 72 hours			
NOEC (acute)	171 mg/l 48 hours- daphnia			
NOEC (chronic)	24.1 mg/l 21 days- microorganism			
N,N-Dimethylaminoethyl methacrylate (2867-47-2)				
LC50 - Fish [1]	19.1 mg/l (Exposure time: 96 h - Species: Oryzias latipes [semi-static])			
EC50 - Crustacea [1]	53 mg/l (Exposure time: 48 h - Species: Daphnia magna)			
Diphenyl-2,4,6-trimethylbenzoyl phosphine ox	ride (75980-60-8)			
EC50 - Crustacea [1] 3.53 mg/l Test organisms (species): Daphnia magna				
2-Hydroxy-4-methoxybenzophenone (131-57-7)				
LC50 - Fish [1] 3.8 mg/l (Exposure time: 96 h - Species: Oryzias latipes [semi-static])				

12.2. Persistence and degradability

Predicta Cement - Base Component	
Persistence and degradability	Not established.

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12.3. Bioaccumulative potential

Predicta Cement - Base Component

Bioaccumulative potential Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations

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

Ecology - waste materials

: Avoid release to the environment.

SECTION 14: Transport information

In accordance with Department of Transport / Transportation of Dangerous Goods / IMDG / IATA

DOT	TDG IMDG		IATA
14.1. UN number			
3082	UN3082	3082	3082
14.2. Proper Shipping Name			
Environmentally hazardous substances, liquid, n.o.s. (2,6-di-tert-butyl-p-cresol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,6-di-tert-butyl-p- cresol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,6-di-tert-butyl-p- cresol)	Environmentally hazardous substance, liquid, n.o.s. (2,6-di-tert- butyl-p-cresol)
14.3. Transport hazard class(es	3)		
9	9	9	9
1 1 1 2 2 2 3 3 3 3 3 3 3 3 3 3			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes
No supplementary information available	l ble		

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SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available

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

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

Revision date : 07 July 2021 Other information : None.

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.

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Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 09 July 2021 Revision date: 09 July 2021 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Trade name : Predicta Cement - Catalyst Component

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Bioactive Self-Adhesive Cement

1.3. Supplier

Parkell Inc. 300 Executive Drive Edgewood, NY 11717 T (631) 249-1134

1.4. Emergency telephone number

Emergency number : INFOTRAC 1-800-535-5053

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Organic Peroxide Category E
Acute toxicity (dermal), Category 4
Skin corrosion/irritation Category 1C
Serious eye damage/eye irritation Category 1

Skin sensitization, Category 1

 $Specific \ target \ organ \ toxicity -- Single \ exposure, \ Category \ 3, \ Respiratory \ tract \ irritation$

Specific target organ toxicity (repeated exposure) Category 2

Heating may cause a fire. Harmful in contact with skin

Causes severe skin burns and eye damage

Causes serious eye damage
May cause an allergic skin reaction
May cause respiratory irritation

May cause damage to organs through prolonged or repeated

exposure

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)









Signal word (GHS US) : Danger

Hazard statements (GHS US)

: Heating may cause a fire.

Harmful in contact with skin.

Causes severe skin burns and eye damage May cause an allergic skin reaction

May cause an allergic skin reaction Causes serious eye damage May cause respiratory irritation

May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep/Store away from combustible materials

Keep only in original container. Wash hands thoroughly after handling.

Do not breathe mist, spray.

Wash hands thoroughly after handling.

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Use only outdoors or in a well-ventilated area.

Contaminated work clothing must not be allowed out of the workplace.

Wear eye protection, protective clothing, protective gloves.

If swallowed: rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison centre or doctor.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Protect from sunlight.

Store at temperatures not exceeding 60 °C/140 °F. Keep cool.

Store away from other materials.

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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
Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega[(2-methyl-1-oxo-2-propenyl)oxy]-	CAS-No.: 41637-38-1	10 – 25	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT SE 3, H335
2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester	CAS-No.: 6606-59-3	1 – 20	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
2-Hydroxyethyl methacrylate (HEMA)	CAS-No.: 868-77-9	1 – 15	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-propanediyl ester	CAS-No.: 1830-78-0	5 – 15	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

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Name	Product identifier	%	GHS US classification
Cumene hydroperoxide	CAS-No.: 80-15-9	1 – 10	Org. Perox. E, H242 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation:gas), H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT RE 2, H373
10- Methacryloyloxydecyl dihydrogen phosphate (10-MDP)	CAS-No.: 85590-00-7	5 – 10	Eye Irrit. 2, H319 Skin Sens. 1, H317
2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester	CAS-No.: 1565-94-2	1 – 10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
2-[(2-Methyl-1-oxoallyl)oxy]ethyl 1,3-dihydro-1,3-dioxoisobenzofuran-5-carboxylate	CAS-No.: 70293-55-9	1 – 3	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison

center/doctor/physician if you feel unwell.

First-aid measures after skin contact : Wash off immediately and plentifully with water for at least 20 minutes. Take off immediately all

contaminated clothing. Get medical advice if skin irritation persists.

First-aid measures after eye contact : Wash off immediately and plentifully with water for at least 20 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness

persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause damage to organs through prolonged or repeated exposure.

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Harmful in contact with skin. Burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : Heating may cause a fire. Hazardous decomposition products in case of fire : Toxic fumes may be released.

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Safety Data Sheet

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5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. 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

General measures : Evacuate unnecessary personnel.

6.1.1. For non-emergency personnel

Protective equipment : Wear personal protective equipment.

Emergency procedures : No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Wear recommended personal 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. Store away from other materials.

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

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13: "Disposal considerations"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid

contact with skin and eyes. Do not breathe mist, spray.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or

smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when

not in use. Keep away from combustible materials. Store away from other materials. Protect from

sunlight. Store locked up.

Incompatible materials : Combustible materials.

Storage temperature : $< 60 \, ^{\circ}\text{C} \, (140 \, ^{\circ}\text{F})$

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Predicta Cement - Catalyst Component

No additional information available

Cumene hydroperoxide (80-15-9)

USA - AIHA - Occupational Exposure Limits

WEEL TWA [ppm]	1 ppm
AIHA chemical category	skin notation

10- Methacryloyloxydecyl dihydrogen phosphate (10-MDP) (85590-00-7)

No additional information available

2-[(2-Methyl-1-oxoallyl)oxy]ethyl 1,3-dihydro-1,3-dioxoisobenzofuran-5-carboxylate (70293-55-9)

No additional information available

2-Hydroxyethyl methacrylate (HEMA) (868-77-9)

No additional information available

2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-propanediyl ester (1830-78-0)

No additional information available

2-Propenoic acid, 2-methyl-, (1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] ester (1565-94-2)

No additional information available

Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-[(2-methyl-1-oxo-2-propenyl)oxy]-(41637-38-1)

No additional information available

2-Propenoic acid, 2-methyl-, 1,6-hexanediyl ester (6606-59-3)

No additional information available

8.2. Appropriate engineering controls

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

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Impermeable protective gloves

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

An approved organic vapor respirator/supplied air or self-contained breathing apparatus must be used when vapor concentration exceeds applicable exposure limits

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Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid Appearance Paste. Colorless Color : Characteristic Odor : No data available Odor threshold : No data available pН 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) : Heating may cause a fire.

Vapor pressure No data available Relative vapor density at 20 °C : No data available : No data available Relative density : No data available Solubility Partition coefficient n-octanol/water (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

Heating may cause a fire.

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

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Combustible materials.

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10.6. Hazardous decomposition products

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

SECTION 11: Toxicolo	ogical information
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SECTION 11: Toxicological Information				
11.1. Information on toxicological effects				
Acute toxicity (dermal) : Acute toxicity (inhalation) :	Not classified (Based on available data, the classification criteria are not met) Harmful in contact with skin. Not classified (Based on available data, the classification criteria are not met)			
Predicta Cement - Catalyst Component				
ATE US (dermal)	1260 mg/kg bodyweight			
Cumene hydroperoxide (80-15-9)				
LD50 oral rat	382 mg/kg			
LD50 dermal rabbit	0.126 ml/kg			
LC50 Inhalation - Rat [ppm]	220 ppm/4h			
2-[(2-Methyl-1-oxoallyl)oxy]ethyl 1,3-dihydro-	,3-dioxoisobenzofuran-5-carboxylate (70293-55-9)			
LD50 oral rat	> 2 g/kg			
2-Hydroxyethyl methacrylate (HEMA) (868-77-	9)			
LD50 dermal rabbit	> 3000 mg/kg			
Serious eye damage/irritation : Respiratory or skin sensitization : Germ cell mutagenicity : Carcinogenicity : Reproductive toxicity :	Causes severe skin burns. Causes serious eye damage. May cause an allergic skin reaction. Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) May cause respiratory irritation.			
2-Propenoic acid, 2-methyl-, 2-hydroxy-1,3-pro	opanediyl ester (1830-78-0)			
STOT-single exposure	May cause respiratory irritation.			
Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega[(2-methyl-1-oxo-2-propenyl)oxy]-(41637-38-1)				
STOT-single exposure	May cause respiratory irritation.			
2-Propenoic acid, 2-methyl-, 1,6-hexanediyl es	ster (6606-59-3)			
STOT-single exposure	May cause respiratory irritation.			
STOT-repeated exposure :	May cause damage to organs through prolonged or repeated exposure.			
Cumene hydroperoxide (80-15-9)				
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.			
2-Hydroxyethyl methacrylate (HEMA) (868-77-9)				
NOAEL (oral,rat,90 days)	< 30 mg/kg bodyweight/day OECD 422.			
Viscosity, kinematic : Symptoms/effects : Symptoms/effects after inhalation :	Not classified (Based on available data, the classification criteria are not met) Not applicable May cause damage to organs through prolonged or repeated exposure. May cause respiratory irritation. Harmfula in contact with skin. Burns. May cause an allergic skin reaction.			

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Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Cumene hydroperoxide (80-15-9)		
LC50 - Fish [1]	3.9 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])	
2-Hydroxyethyl methacrylate (HEMA) (868-77-9)		
LC50 - Fish [2]	227 mg/l 96 hours	
ErC50 algae	836 mg/l 72 hours	
NOEC (acute)	171 mg/l 48 hours- daphnia	
NOEC (chronic)	24.1 mg/l 21 days- microorganism	

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Cumene hydroperoxide (80-15-9)	
BCF - Fish [1]	35.5

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the ozone layer : No additional information available Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with Department of Transport / Transportation of Dangerous Goods / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
3108	UN3108	3108	3108

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DOT	TDG	IMDG	IATA	
14.2. Proper Shipping Name				
Organic peroxide type E, solid (Cumene hydroperoxide)	ORGANIC PEROXIDE TYPE E, SOLID (Cumene hydroperoxide)	ORGANIC PEROXIDE TYPE E, SOLID (ORGANIC PEROXIDE TYPE E, LIQUID)	Organic peroxide type e, solid	
14.3. Transport hazard class(es	s)			
5.2	5.2	5.2	5.2	
ORGANIC PEROXIDE	5.2	5.2	5.2	
14.4. Packing group				
Not applicable	II	Not applicable	Not applicable	
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes	
Consult the associated transport regulations for available and applicable exceptions or exemptions.				

SECTION 15: Regulatory information

15.1. US Federal regulations

No additional information available.

15.2. International regulations

CANADA

No additional information available.

National regulations

No additional information available.

15.3. US State regulations

No additional information available.

SECTION 16: Other information

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

Revision date : 09 July 2021 Other information : None.

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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.