

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the GHS guidelines & India Hazardous substances (Classification, Labeling & Packaging) Draft Rules 2011.

SECTION 1: Identification

1.1. Product identifier

3MTM ClinproTM Sealant (12622, 12627, 12632, 12637, 12642, 12647)

Product Identification Numbers

 70-2010-3009-8
 70-2010-3152-6
 70-2010-3154-2
 70-2010-8733-8
 70-2014-1240-3

 70-2014-1241-1
 70-2014-1242-9
 70-2014-1660-2
 70-2014-1662-8
 HB-0043-6132-3

XA-0092-1263-1

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Dental sealant

Restrictions on use

For use by dental professionals only.

1.3. Supplier's details

Address: 3M India Limited, plot-48-51, Electronic city, Hosur road, Bangalore-560100

Telephone: 080-45543000, contact Product EHS team

E Mail: productehs.in@mmm.com
Website: http://solutions.3mindia.co.in

1.4. Emergency telephone number

080-45543000 (Contact hours: 8:00 AM to 5:00 PM)

SECTION 2: Hazard identification

Under MSIHC Rules, information is noted below on flammability, acute toxicity and explosivity relevant to this product. In line with international standards, information on other hazard classes and associated precautionary statements relevant to this product are included as well.

2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 2B.

Skin Corrosion/Irritation: Category 3.

Skin Sensitizer: Category 1.

Acute Aquatic Toxicity: Category 3.

2.2. Label elements

Signal Word

WARNING!

Symbols

Exclamation mark |

Pictograms



HAZARD STATEMENTS:

H320 Causes eye irritation. H316 Causes mild skin irritation.

H317 May cause an allergic skin reaction.

H402 Harmful to aquatic life.

PRECAUTIONARY STATEMENTS

Prevention:

P280E Wear protective gloves.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Disposal:

P501 Dispose of contents/container in accordance with applicable

local/regional/national/international regulations.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
(1-methylethylidene)bis[4,1-	1565-94-2	40 - 50
phenyleneoxy(2-hydroxy-3,1-propanediyl)]		
bismethacrylate		
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0	40 - 50
SILANE TREATED SILICA	68611-44-9	5 - 10
Tetrabutylammonium tetrafluoroborate	429-42-5	< 5
Titanium dioxide	13463-67-7	< 0.5
Hydroquinone	123-31-9	< 0.05

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eve contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention

If swallowed

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Allergic skin reaction (redness, swelling, blistering, and itching).

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable Extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

SubstanceConditionCarbon monoxide.During combustion.Carbon dioxide.During combustion.

5.3. Special protective actions for fire-fighters

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Contain spill. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

A no-touch technique is recommended. If skin contact occurs, wash skin with soap and water. Acrylates may penetrate

commonly-used gloves. If product contacts glove, remove and discard glove, wash hands immediately with soap and water and then re-glove. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Do not get in eyes.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Hydroquinone	123-31-9	ACGIH	TWA:1 mg/m3	A3: Confirmed animal
				carcin., Dermal
				Sensitizer
Titanium dioxide	13463-67-7	ACGIH	TWA:10 mg/m ³	A4: Not class. as human
				carcin

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety glasses with side shields.

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Physical state	Liquid.	
Specific Physical Form:	Liquid.	
Color	Transparent Yellow	
Odor	Characteristic Odour	
Odour threshold	No data available.	

Melting point/Freezing point: NA Boiling point/Initial boiling point/Boiling range Flash point Flash point > 93 °C (200 °F) Evaporation rate No data available. Flammability (solid, gas) Not applicable. Flammable Limits(LEL) No data available. Flammable Limits(UEL) No data available. Vapour pressure Vapour Density and/or Relative Vapor Density No data available. No data available.
Flash point Flash point > 93 °C (200 °F) Evaporation rate No data available. Flammability (solid, gas) Not applicable. Flammable Limits(LEL) No data available. Flammable Limits(UEL) No data available. Vapour pressure <=186,158.4 Pa [@ 55 °C] Vapor Density and/or Relative Vapor Density No data available.
Evaporation rate No data available. Flammability (solid, gas) Not applicable. Flammable Limits(LEL) No data available. Flammable Limits(UEL) No data available. Vapour pressure <=186,158.4 Pa [@ 55 °C] Vapor Density and/or Relative Vapor Density No data available.
Flammability (solid, gas) Flammable Limits(LEL) Flammable Limits(UEL) No data available. No data available. Vapour pressure <=186,158.4 Pa [@ 55 °C] Vapor Density and/or Relative Vapor Density No data available.
Flammable Limits(LEL) No data available. Flammable Limits(UEL) No data available. Vapour pressure <=186,158.4 Pa [@ 55 °C] Vapor Density and/or Relative Vapor Density No data available.
Flammable Limits(UEL) No data available. <=186,158.4 Pa [@ 55 °C] Vapor Density and/or Relative Vapor Density No data available.
Vapour pressure <=186,158.4 Pa [@ 55 °C] Vapor Density and/or Relative Vapor Density No data available.
Vapor Density and/or Relative Vapor Density No data available.
10 / 1
Density 1.2 g/ml
Relative density 1.2 [Ref Std:WATER=1]
Water solubility No data available.
Solubility- non-water No data available.
Partition coefficient: n-octanol/water Not applicable.
Autoignition temperature No data available.
Decomposition temperature No data available.
Viscosity/Kinematic Viscosity ± 1,000 mm ² /sec
Volatile organic compounds (VOC) No data available.
Percent volatile No data available.
VOC less H2O & exempt solvents No data available.
Molecular weight No data available.

Nanoparticles

This material contains nanoparticles.

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non reactive under normal use conditions

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be

reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

This product may have a characteristic odour; however, no adverse health effects are anticipated.

Skin contact

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eve contact

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

Additional Health Effects:

Carcinogenicity:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use:

Contains a chemical or chemicals which can cause cancer.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion	Rat	LD50 > 5,000 mg/kg
Overall product	Dermal	similar	LD50 Not available
		health	
		hazards	
2,2'-ethylenedioxydiethyl dimethacrylate	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
		nal	
		judgeme	
		nt	
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Rat	LD50 10,837 mg/kg
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-	Dermal	Professio	LD50 estimated to be > 5,000 mg/kg
propanediyl)] bismethacrylate		nal	
		judgeme	
		nt	
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	Ingestion	Rat	LD50 > 11,700 mg/kg
SILANE TREATED SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
SILANE TREATED SILICA	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
SILANE TREATED SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation-	Rat	LC50 > 6.82 mg/l
	Dust/Mist		
	(4 hours)		
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg

Hydroquinone	Dermal	Rat	LD50 > 4,800 mg/kg
Hydroquinone	Ingestion	Rat	LD50 302 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
2,2'-ethylenedioxydiethyl dimethacrylate	Guinea	Mild irritant
	pig	
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]	Rabbit	No significant irritation
bismethacrylate		
SILANE TREATED SILICA	Rabbit	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
Hydroquinone	Human	Minimal irritation
	and	
	animal	

Serious Eye Damage/Irritation

Name	Species	Value
2,2'-ethylenedioxydiethyl dimethacrylate	Professio	Moderate irritant
	nal	
	judgemen	
	t	
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]	In vitro	No significant irritation
bismethacrylate	data	
SILANE TREATED SILICA	Rabbit	No significant irritation
Titanium dioxide	Rabbit	No significant irritation
Hydroquinone	Human	Corrosive

Sensitization:

Skin Sensitisation

Name	Species	Value
2,2'-ethylenedioxydiethyl dimethacrylate	Human	Sensitising
	and	
	animal	
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]	Mouse	Not classified
bismethacrylate		
SILANE TREATED SILICA	Human	Not classified
	and	
	animal	
Titanium dioxide	Human	Not classified
	and	
	animal	
Hydroquinone	Guinea	Sensitising
	pig	

Respiratory Sensitisation

For the component/components, either no data are currently available or the data are not sufficient for classification.

Germ Cell Mutagenicity

Germ Cen Mutagementy		
Name	Route	Value
2,2'-ethylenedioxydiethyl dimethacrylate	In Vitro	Some positive data exist, but the data are not
		sufficient for classification
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]	In Vitro	Not mutagenic
bismethacrylate		
SILANE TREATED SILICA	In Vitro	Not mutagenic
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
Hydroquinone	In Vitro	Some positive data exist, but the data are not

		sufficient for classification
Hydroquinone	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
2,2'-ethylenedioxydiethyl dimethacrylate	Dermal	Mouse	Not carcinogenic
SILANE TREATED SILICA	Not	Mouse	Some positive data exist, but the data are not
	specified.		sufficient for classification
Titanium dioxide	Ingestion	Multiple	Not carcinogenic
		animal	
		species	
Titanium dioxide	Inhalation	Rat	Carcinogenic.
Hydroquinone	Dermal	Mouse	Not carcinogenic
Hydroquinone	Ingestion	Multiple	Some positive data exist, but the data are not
		animal	sufficient for classification
		species	

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Not classified for female reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Not classified for male reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Not classified for development	Mouse	NOAEL 1 mg/kg/day	1 generation
(1-methylethylidene)bis[4,1- phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
SILANE TREATED SILICA	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Hydroquinone	Ingestion	Not classified for female reproduction	Rat	NOAEL 150 mg/kg/day	2 generation
Hydroquinone	Ingestion	Not classified for male reproduction	Rat	NOAEL 150 mg/kg/day	2 generation
Hydroquinone	Ingestion	Not classified for development	Rat	NOAEL 100 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Hydroquinone	Ingestion	nervous system	May cause damage to organs	Rat	NOAEL Not available	not applicable
Hydroquinone	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 400 mg/kg	not applicable

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2,2'-ethylenedioxydiethyl dimethacrylate	Dermal	kidney and/or bladder blood	Not classified	Mouse	NOAEL 833 mg/kg/day	78 weeks
(1- methylethylidene)bis[4,1- phenyleneoxy(2-hydroxy-	Ingestion	endocrine system hematopoietic system liver heart	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days

3,1-propanediyl)]		skin				
bismethacrylate		gastrointestinal tract				
		bone, teeth, nails,				
		and/or hair				
		immune system				
		muscles nervous				
		system eyes				
		kidney and/or				
		bladder respiratory				
		system vascular				
		system				
SILANE TREATED	Inhalation	respiratory system	Not classified	Human	NOAEL Not	occupational
SILICA		silicosis			available	exposure
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the	Rat	LOAEL 0.01	2 years
			data are not sufficient for		mg/l	
			classification			
Titanium dioxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not	occupational
	ļ				available	exposure
Hydroquinone	Ingestion	blood	Not classified	Rat	NOAEL Not	40 days
					available	
Hydroquinone	Ingestion	bone marrow liver	Not classified	Rat	NOAEL Not	9 weeks
					available	
Hydroquinone	Ingestion	kidney and/or	Not classified	Rat	LOAEL 50	15 months
		bladder			mg/kg/day	
Hydroquinone	Ocular	eyes	Not classified	Human	NOAEL Not	occupational
	1				available	exposure

Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

GHS Acute 3: Harmful to aquatic life.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

Material	CAS Nbr	Organism	Туре	Exposure	Test endpoint	Test result
(1-	1565-94-2	Green Algae	Endpoint not	96 hours		>100 mg/l
methylethylide			reached			
ne)bis[4,1-						
phenyleneoxy(
2-hydroxy-3,1-						
propanediyl)]						
bismethacrylate						
(1-	1565-94-2	Water flea	Endpoint not	48 hours		>100 mg/l

ما داده المعالم المعالم المعالم	I	I	reached	I	I	<u> </u>
methylethylide			reached			
ne)bis[4,1-						
phenyleneoxy(
2-hydroxy-3,1-						
propanediyl)]						
bismethacrylate	1.5.5.0.4.6			0.61		100 //
(1-	1565-94-2	Common Carp	Estimated	96 hours	No tox obs at	>100 mg/l
methylethylide					lmt of water sol	
ne)bis[4,1-						
phenyleneoxy(
2-hydroxy-3,1-						
propanediyl)]						
bismethacrylate						
(1-	1565-94-2	Green Algae	Experimental	96 hours	Effect	1.1 mg/l
methylethylide					Concentration	_
ne)bis[4,1-					10%	
phenyleneoxy(
2-hydroxy-3,1-						
propanediyl)]						
bismethacrylate						
2,2'-	109-16-0	Green Algae	Experimental	72 hours	EC50	>100 mg/l
ethylenedioxyd	100 10 0	Green ringue	Emperimentar	/2 Hours	Less	100 mg/1
iethyl						
dimethacrylate						
2,2'-	109-16-0	Zebra Fish	Experimental	96 hours	LC50	16.4 mg/l
ethylenedioxyd	109-10-0	ZCOIa l'Isii	Experimental	70 Hours	LC30	10.4 mg/1
iethyl						
dimethacrylate						
2,2'-	109-16-0	Croon algae	Evmonimontol	72 hours	NOEC	18.6 mg/l
	109-10-0	Green algae	Experimental	/2 nours	NOEC	18.6 mg/1
ethylenedioxyd						
iethyl						
dimethacrylate	100 16 0	777	D	0.1 .1	NOEG	22 //
2,2'-	109-16-0	Water flea	Experimental	21 days	NOEC	32 mg/l
ethylenedioxyd						
iethyl						
dimethacrylate						
SILANE	68611-44-9		Data not			N/A
TREATED			available or			
SILICA			insufficient for			
			classification			
Tetrabutylamm	429-42-5		Data not			N/A
onium			available or			
tetrafluoroborat			insufficient for			
e			classification			
Titanium	13463-67-7	Activated	Experimental	3 hours	NOEC	>=1,000 mg/l
dioxide		sludge	1			
Titanium	13463-67-7	Diatom	Experimental	72 hours	EC50	>10,000 mg/l
dioxide			1			, 3
Titanium	13463-67-7	Fathead	Experimental	96 hours	LC50	>100 mg/l
dioxide	12.102.07.7	minnow		5 110415		1
Titanium	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
dioxide	1 - / 0 - 0 0 - 1	vv ater riea	Experimental	70 HOUIS	LC30	100 IIIg/1
	12462 67 7	Diotom	Exposing antal	72 hours	NOEC	5 600 mg/l
Titanium	13463-67-7	Diatom	Experimental	/ Z HOUTS	NOEC	5,600 mg/l
dioxide	122 21 2	 • • • • •	D	2.1	1050	71 /1
Hydroquinone	123-31-9	Activated	Experimental	2 hours	IC50	71 mg/l

		sludge				
Hydroquinone	123-31-9	Green algae	Experimental	72 hours	EC50	0.053 mg/l
Hydroquinone	123-31-9	Rainbow trout	Experimental	96 hours	LC50	0.044 mg/l
Hydroquinone	123-31-9	Water flea	Experimental	48 hours	EC50	0.061 mg/l
Hydroquinone	123-31-9	Fathead	Experimental	32 days	NOEC	>=0.066 mg/l
		minnow				
Hydroquinone	123-31-9	Green Algae	Experimental	72 hours	NOEC	0.0015 mg/l
Hydroquinone	123-31-9	Water flea	Experimental	21 days	NOEC	0.0029 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
(1-	1565-94-2	Experimental	28 days	BOD	21 %	similar to OECD 301F
methylethylide		Biodegradation			BOD/ThBOD	
ne)bis[4,1-						
phenyleneoxy(
2-hydroxy-3,1-						
propanediyl)]						
bismethacrylate						
2,2'-	109-16-0	Experimental	28 days	CO2 evolution	85 % weight	OECD 301B - Modified
ethylenedioxyd		Biodegradation				sturm or CO2
iethyl						
dimethacrylate						
SILANE	68611-44-9	Data not			n/a	
TREATED		available-				
SILICA		insufficient				
Tetrabutylamm	429-42-5	Data not			N/A	
onium		available-				
tetrafluoroborat		insufficient				
e						
Titanium	13463-67-7	Data not			N/A	
dioxide		available-				
		insufficient				
Hydroquinone	123-31-9	Experimental	14 days	BOD	70 %	OECD 301C - MITI
·		Biodegradation			BOD/ThBOD	test (I)

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
(1-	1565-94-2	Experimental		Log Kow	4.63	Non-standard method
methylethylide		Bioconcentrati				
ne)bis[4,1-		on				
phenyleneoxy(
2-hydroxy-3,1-						
propanediyl)]						
bismethacrylate						
2,2'-	109-16-0	Experimental		Log Kow	2.3	Non-standard method
ethylenedioxyd		Bioconcentrati				
iethyl		on				
dimethacrylate						
SILANE	68611-44-9	Data not	N/A	N/A	N/A	N/A
TREATED		available or				
SILICA		insufficient for				
		classification				

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Tetrabutylamm	429-42-5	Data not	N/A	N/A	N/A	N/A
onium		available or				
tetrafluoroborat		insufficient for				
e		classification				
Titanium	13463-67-7	Experimental	42 days	Bioaccumulatio	9.6	Non-standard method
dioxide		BCF-Carp	-	n factor		
Hydroquinone	123-31-9	Experimental		Log Kow	0.59	Non-standard method
		Bioconcentrati				
		on				

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other Adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility.

SECTION 14: Transport Information

Not hazardous for transportation.

Air Transport (IATA)Regulations

UN No Not applicable

Proper Shipping Name Not applicable Hazard Classs/Division Not applicable Subsidiary Risk Not applicable Packing Group: Not applicable

Marine Transport (IMDG)

UN No Not applicable

Proper Shipping Name Not applicable Hazard Classs/Division Not applicable Subsidiary Risk Not applicable Packing Group: Not applicable

Environmental Hazards: Not applicable

SECTION 15: Regulatory information

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

Global inventory status

Contact 3M for more information. The components of this product are in compliance with the new substance notification requirements of CEPA.

Applicable Environmental, Health and Safety Regulations

The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989

The Bio Medical Waste (Management & Handling) Rules, 1998

Hazardous Chemicals (Classification, Packaging and Labelling Draft Rules), 2011

The following ingredients are listed as hazardous on Part II of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules
Hydroquinone

The following ingredients are classified as hazardous based on the criteria listed under Part I of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules:

The product is classified as Non-Hazardous as per MSIHC Rules, 1989.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision information:

No revision information

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M India SDSs are available at http://solutions.3mindia.co.in