

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

3M FILTEK Z250 UNIVERSAL RESTORATIVE (ALL SHADES EXCEPT B0.5 and B1)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Dental product

Restrictions on Use

For use only by dental professionals

1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

Telephone: +44 (0)1344 858 000 E Mail: tox.uk@mmm.com Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

This product is a medical device as defined in Directive 93/42/EEC (MDD), which is invasive or used in direct physical contact with the human body, and therefore is exempt from the requirements of classification and labelling according to Regulation (EC) No. 1272/2008 (CLP; Article 1, paragraph 5). Although not required, the classification and label information, as applicable, is provided below.

CLASSIFICATION:

Skin Sensitization, Category 1B - Skin Sens. 1B; H317

For full text of H phrases, see Section 16.

2.2. Label elements CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

WARNING.

Symbols:

GHS07 (Exclamation mark) |

Pictograms



HAZARD STATEMENTS:

H317 May cause an allergic skin reaction.

PRECAUTIONARY STATEMENTS

Prevention:

P280E Wear protective gloves.

Response:

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

2.3. Other hazards

For information on hazards and safe use, please consider the corresponding sections of this document.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Ceramic materials and wares, chemicals, hydrolysis products with 3- (trimethoxysilyl)propyl methacrylate	444758-98-9		75 - 85	Substance not classified as hazardous
Bisphenol A dimethacrylate, ethoxylated	41637-38-1		1 - 10	Aquatic Chronic 4, H413 (Vendor)
7,7,9(or 7,9,9)-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	72869-86-4	276-957-5	1 - 10	Skin Sens. 1B, H317 (Self Classified)
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	1565-94-2	216-367-7	1 - 10	Skin Sens. 1B, H317 (Self Classified)
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0	203-652-6	< 5	Skin Sens. 1, H317 (Self Classified)
Aluminium oxide (REACH Reg. No.:01-2119529248-35)	1344-28-1	215-691-6	< 5	Substance with a Community level exposure limit in the workplace
2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester	96478-09-0		< 0.5	Substance not classified as hazardous
Ethyl 4-dimethylaminobenzoate	10287-53-3	233-634-3	< 0.2	Substance not classified as hazardous

Please see section 16 for the full text of any H statements referred to in this section

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

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

See Section 11.1 Information on toxicological effects

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

Not applicable

SECTION 5: Fire-fighting measures

5.1. 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

Substance

Condition

Carbon monoxide. Carbon dioxide.

During combustion.

During combustion.

5.3. Advice for fire-fighters

No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. 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

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

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 get in eyes, on skin, or on clothing. 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.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

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

Aluminium oxide 1344-28-1 UK HSC TWA(as inhalable dust):10 mg/m³;TWA(as respirable

dust):4 mg/m³

UK HSC: UK Health and Safety Commission

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

CEIL: Ceiling

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

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

Respiratory protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid.
Specific Physical Form: Paste

Appearance/Odour Slight acrylate odour, various shades

No data available. **Odour threshold** Not applicable. рH Boiling point/boiling range Not applicable. No data available. Melting point Flammability (solid, gas) Not classified **Explosive properties** Not classified Not classified **Oxidising properties** Flash point No flash point **Autoignition temperature** No data available. Flammable Limits(LEL) Not applicable. Flammable Limits(UEL) Not applicable. Vapour pressure Not applicable.

Relative density 2.1 [Ref Std:WATER=1]

Water solubilityNegligibleSolubility- non-waterNo data available.Partition coefficient: n-octanol/waterNot applicable.Evaporation rateNot applicable.Vapour densityNot applicable.Decomposition temperatureNo data available.

Viscosity approximately 300,000 mPa-s

Density 2.1 g/cm³

9.2. Other information

Molecular weightNo data available.Percent volatileNo data available.

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

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

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

Contact with the skin during product use is not expected to result in significant irritation. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion

May be harmful if swallowed.

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

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		No data available; calculated ATE2,000 - 5,000 mg/kg
Ceramic materials and wares, chemicals, hydrolysis products with 3-(trimethoxysilyl)propyl methacrylate	Dermal		LD50 estimated to be > 5,000 mg/kg
Ceramic materials and wares, chemicals, hydrolysis products with 3-(trimethoxysilyl)propyl methacrylate	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
7,7,9(or 7,9,9)-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Bisphenol A dimethacrylate, ethoxylated	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
7,7,9(or 7,9,9)-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl bismethacrylate	Ingestion	Rat	LD50 > 5,000 mg/kg

Bisphenol A dimethacrylate, ethoxylated	Ingestion	Rat	LD50 > 2,000 mg/kg
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	Dermal	Professio nal judgeme nt	LD50 estimated to be 2,000 - 5,000 mg/kg
2,2'-ethylenedioxydiethyl dimethacrylate	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Rat	LD50 10,837 mg/kg
Aluminium oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium oxide	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminium oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Ethyl 4-dimethylaminobenzoate	Dermal	Rat	LD50 > 2,000 mg/kg
Ethyl 4-dimethylaminobenzoate	Ingestion	Rat	LD50 > 2,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Ceramic materials and wares, chemicals, hydrolysis products with 3-	similar	No significant irritation
(trimethoxysilyl)propyl methacrylate	compoun	
	ds	
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]	Not	Minimal irritation
bismethacrylate	available	
2,2'-ethylenedioxydiethyl dimethacrylate	Guinea	Mild irritant
	pig	
Aluminium oxide	Rabbit	No significant irritation
Ethyl 4-dimethylaminobenzoate	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ceramic materials and wares, chemicals, hydrolysis products with 3- (trimethoxysilyl)propyl methacrylate	similar compoun ds	Mild irritant
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	Not available	Moderate irritant
2,2'-ethylenedioxydiethyl dimethacrylate	Professio nal judgemen t	Moderate irritant
Aluminium oxide	Rabbit	No significant irritation
Ethyl 4-dimethylaminobenzoate	Rabbit	Mild irritant

Skin Sensitisation

Name	Species	Value
Ceramic materials and wares, chemicals, hydrolysis products with 3-	similar	Some positive data exist, but the data are not
(trimethoxysilyl)propyl methacrylate	compoun	sufficient for classification
	ds	
7,7,9(or 7,9,9)-Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecane-1,16-diyl	Guinea	Sensitising
bismethacrylate	pig	
Bisphenol A dimethacrylate, ethoxylated	Guinea	Not sensitising
	pig	-
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)]	Guinea	Sensitising
bismethacrylate	pig	
2,2'-ethylenedioxydiethyl dimethacrylate	Human	Sensitising
	and	-
	animal	

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
Bisphenol A dimethacrylate, ethoxylated	In Vitro	Not mutagenic
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
2,2'-ethylenedioxydiethyl dimethacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification
Aluminium oxide	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Ceramic materials and wares, chemicals, hydrolysis products with	Inhalation	similar	Some positive data exist, but the data are not
3-(trimethoxysilyl)propyl methacrylate		compoun	sufficient for classification
		ds	
2,2'-ethylenedioxydiethyl dimethacrylate	Dermal	Mouse	Not carcinogenic
Aluminium oxide	Inhalation	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
(1-methylethylidene)bis[4,1- phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 0.8 mg/kg/day	premating & during gestation
(1-methylethylidene)bis[4,1- phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 0.8 mg/kg/day	premating & during gestation
(1-methylethylidene)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate	Ingestion	Not toxic to development	Mouse	NOAEL 0.8 mg/kg/day	premating & during gestation
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Not toxic to female reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Not toxic to male reproduction	Mouse	NOAEL 1 mg/kg/day	1 generation
2,2'-ethylenedioxydiethyl dimethacrylate	Ingestion	Not toxic to development	Mouse	NOAEL 1 mg/kg/day	1 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Ceramic materials and wares, chemicals, hydrolysis products with 3-(trimethoxysilyl)propyl methacrylate	Inhalation	pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	similar compoun ds	NOAEL Not available	
(1- methylethylidene)bis[4,1- phenyleneoxy(2-hydroxy- 3,1-propanediyl)] bismethacrylate	Ingestion	endocrine system liver nervous system kidney and/or bladder	All data are negative	Mouse	NOAEL 0.8 mg/kg/day	premating & during gestation
2,2'-ethylenedioxydiethyl dimethacrylate	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for	Mouse	NOAEL 833 mg/kg/day	78 weeks

			classification			
2,2'-ethylenedioxydiethyl	Dermal	blood	All data are negative	Mouse	NOAEL 833	78 weeks
dimethacrylate					mg/kg/day	
Aluminium oxide	Inhalation	pneumoconiosis	Some positive data exist, but the	Human	NOAEL Not	occupational
		pulmonary fibrosis	data are not sufficient for		available	exposure
			classification			

Aspiration Hazard

For the component/components, either no data is currently available or the data is 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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Ethyl 4-	10287-53-3	Fathead	Estimated	96 hours	LC50	8.8 mg/l
dimethylamino		minnow				
benzoate						
7,7,9(or 7,9,9)-	72869-86-4	Fathead	Estimated	96 hours	LC50	1.4 mg/l
Trimethyl-		minnow				
4,13-dioxo-						
3,14-dioxa-						
5,12-						
diazahexadecan						
e-1,16-diyl						
bismethacrylate						
Ceramic	444758-98-9		Data not			
materials and			available or			
wares,			insufficient for			
chemicals,			classification			
hydrolysis						
products with						
3-						
(trimethoxysily						
l)propyl						
methacrylate						
Aluminium	1344-28-1	Water flea	Experimental	48 hours	EC50	>100 mg/l
oxide						
Aluminium	1344-28-1	Fish	Experimental	96 hours	LC50	>100 mg/l
oxide						
Aluminium	1344-28-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
oxide						
Aluminium	1344-28-1	Green algae	Experimental	72 hours	NOEC	>100 mg/l
oxide						
(1-	1565-94-2		Data not			
methylethylide			available or			

ne)bis[4,1-			insufficient for			
phenyleneoxy(classification			
2-hydroxy-3,1-						
propanediyl)]						
bismethacrylate						
2,2'-	109-16-0		Data not			
ethylenedioxyd			available or			
iethyl			insufficient for			
dimethacrylate			classification			
2-Propenoic	96478-09-0	Fathead	Estimated	96 hours	LC50	9.1 mg/l
acid, 2-methyl-,		minnow				
2-[3-(2H-						
benzotriazol-2-						
yl)-4-						
hydroxyphenyl						
]ethyl ester						
Bisphenol A	41637-38-1		Data not			
dimethacrylate,			available or			
ethoxylated			insufficient for			
-			classification			

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Ceramic	444758-98-9	Data not	N/A	N/A	N/A	N/A
materials and		available or				
wares,		insufficient for				
chemicals,		classification				
hydrolysis						
products with						
3-						
(trimethoxysily						
l)propyl						
methacrylate						
Aluminium	1344-28-1	Data not	N/A	N/A	N/A	N/A
oxide		available or				
		insufficient for				
		classification				
7,7,9(or 7,9,9)-	72869-86-4	Estimated	28 days	BOD	52 % weight	OECD 301C - MITI
Trimethyl-		Biodegradation				test (I)
4,13-dioxo-						
3,14-dioxa-						
5,12-						
diazahexadecan						
e-1,16-diyl						
bismethacrylate						
Bisphenol A	41637-38-1	Calculated	28 days	BOD	38 % weight	OECD 301C - MITI
dimethacrylate,		Biodegradation				test (I)
ethoxylated	100 100			200	50.04	
2,2'-	109-16-0	Estimated	28 days	BOD	60 % weight	Other methods
ethylenedioxyd		Biodegradation				
iethyl						
dimethacrylate		 				
Ethyl 4-	10287-53-3	Estimated	28 days	BOD	29 % weight	OECD 301C - MITI
dimethylamino		Biodegradation				test (I)

benzoate						
(1-	1565-94-2	Estimated	28 days	BOD	33 % weight	OECD 301C - MITI
methylethylide		Biodegradation	-			test (I)
ne)bis[4,1-						
phenyleneoxy(
2-hydroxy-3,1-						
propanediyl)]						
bismethacrylate						
2-Propenoic	96478-09-0	Estimated	28 days	BOD	21.4 % weight	OECD 301C - MITI
acid, 2-methyl-,		Biodegradation				test (I)
2-[3-(2H-						
benzotriazol-2-						
yl)-4-						
hydroxyphenyl						
]ethyl ester						

12.3 : Bioaccumulative potential

methylethylide ne)bis[4,1-propanediyl)] bismethacrylate 2-Propenoic 96478-09-0 available or insufficient for classification 2-Propenoic 96478-09-0 available or insufficient for classification 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl glethyl ester Ceramic materials and wares, chemicals, hydrolysis products with 3- (trimethoxysily 1)propyl methacrylate 7,7,9(or 7,9,9)- Tz869-86-4 Estimated BCF 7,79(or 7,9,9)- Trimethyl-4,13-dioxo-3,14-dioxa-5,12- diazahexadecan e-1,16-diyl	Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Classification Data not available or insufficient for classification Potential propaneity Potential propage Potentia		1344-28-1		N/A	N/A	N/A	N/A
Classification Clas							
methylethylide ne)bis[4,1-propanediyl)] bismethacrylate 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl))-4-hydroxyphenyl gethyl ester Ceramic materials and wares, chemicals, hydrolysis products with 3-(trimethoxysily ll)propyl methacrylate 7,7,9(or 7,9,9)- Trimethyl-4,13-dioxo-3,14-dioxa-5,12- diazahexadecane e-1,16-diyl available or insufficient for classification N/A N/A N/A N/A N/A N/A N/A N/			classification				
ne)bis[4,1-phenyleneoxy(2-hydroxy-3,1-propanediyl)] bismethacrylate 2-Propenoic acid, 2-methyl-, insufficient for classification 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl] plethyl ester Ceramic materials and wares, chemicals, hydrolysis products with 3- (trimethoxysily l)propyl methacrylate 7,7,9(or 7,9,9)- 72869-86-4 7,7,9(or 7,9,9)- 71minethyl-4,13-dioxo-3,14-dioxa-5,12- diazahexadecan e-1,16-diyl	(1-	1565-94-2		N/A	N/A	N/A	N/A
phenyleneoxy(2-hydroxy-3,1- propanediyl) bismethacrylate 2-Propenoic acid, 2-methyl- 2-[3-(2H- benzotriazol-2- yl)-4- hydroxyphenyl ethyl ester Ceramic materials and wares, chemicals, hydrolysis products with 3- (trimethoxysily l)propyl methacrylate 7,7,9(or 7,9,9)- Trimethyl- 4,13-dioxo- 3,14-dioxa- 5,12- diazahexadecan e-1,16-diyl Data not available or insufficient for classification N/A N/A N/A N/A N/A N/A N/A N/							
2-hydroxy-3,1-propanediyl)] bismethacrylate 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl lethyl ester Ceramic materials and wares, chemicals, hydrolysis products with 3-(trimethoxysily l)propyl methacrylate (trimethoxysily l)propyl methacrylate 7,7,9(or 7,9,9)- 77,9,9-7,7,9(or 7,9,9)-7,3,1-4-dioxa-5,12-diazahexadecan e-1,16-diyl							
propanediyl) bismethacrylate 2-Propenoic acid, 2-methyl-, 2-[3-(2H- benzotriazol-2- yl)-4- hydroxyphenyl lethyl ester Ceramic materials and wares, chemicals, hydrolysis products with 3- (trimethoxysily l)propyl methacrylate 7,7,9(or 7,9,9)- Trimethyl- 4,13-dioxo- 3,14-dioxa- 5,12- diazahexadecan e-1,16-diyl Data not available or insufficient for classification N/A N/A N/A N/A N/A N/A N/A N/			classification				
bismethacrylate 2-Propenoic acid, 2-methyl-, 2-[3-(2H- benzotriazol-2-yl)-4- hydroxyphenyl lethyl ester Ceramic materials and wares, chemicals, hydrolysis products with 3- (trimethoxysily l)propyl methacrylate 7,7,9(or 7,9,9)- Trimethyl- 4,13-dioxo- 3,14-dioxa- 5,12- diazahexadecan e-1,16-diyl Data not available or insufficient for classification N/A							
2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl lethyl ester Ceramic materials and wares, chemicals, hydrolysis products with 3- (trimethoxysily l)propyl methacrylate 7,7,9(or 7,9,9)- Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecan e-1,16-diyl							
acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl gethyl ester Ceramic materials and wares, chemicals, hydrolysis products with 3-(trimethoxysily l)propyl methacrylate 7,7,9(or 7,9,9)- Trimethyl-4,13-dioxo-3,14-dioxa-5,12-diazahexadecan e-1,16-diyl		06470.00.0	D	NT/A	DT / A	NT / A	NT/A
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3,14-dioxa- 5,12- diazahexadecan e-1,16-diyl			- Otner		n lactor		Bioconcentration factor
5,12- diazahexadecan e-1,16-diyl							
diazahexadecan e-1,16-diyl							
e-1,16-diyl							
	bismethacrylate						

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Bisphenol A	41637-38-1	Calculated	Bioaccumulatio	6.7	Estimated:
dimethacrylate,		Bioconcentrati	n factor		Bioconcentration factor
ethoxylated		on			
Ethyl 4-	10287-53-3	Estimated	Bioaccumulatio	19	Estimated:
dimethylamino		Bioconcentrati	n factor		Bioconcentration factor
benzoate		on			
2,2'-	109-16-0	Experimental	Log Kow	1.88	Other methods
ethylenedioxyd		Bioaccumulatio			
iethyl		n			
dimethacrylate					

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

Dispose of waste product in a permitted industrial waste facility.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

180106* Chemicals consisting of or containing dangerous substances.

SECTION 14: Transportation information

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.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

H317 May cause an allergic skin reaction.

H413 May cause long lasting harmful effects to aquatic life.

Revision information:

Company Telephone information was added.

Section 1: Product identification numbers information was deleted.

Section 1: Product name information was modified.

Section 1: Restrictions on use information information was added.

Section 2: H phrase reference information was added.

Section 2: Indication of danger information information was deleted.

Label: CLP Classification information was added.

Label: CLP Classification information was modified.

Section 02: Label Elements: CLP Medical Device information was added.

Label: CLP Precautionary - Prevention information was added.

Label: CLP Precautionary - Response information was added.

Label: Graphic Text information was deleted.

Label: Graphic information was added.

Label: Graphic information was deleted.

Label: Signal Word information was added.

Section 2: Label ingredient information information was deleted.

Section 2: Other hazards phrase information was modified.

Section 2: R phrase reference information was deleted.

Remark (phrase) information was deleted.

Risk phrase information was deleted.

Safety phrase information was deleted.

Section 3: Composition/ Information of ingredients table information was modified.

Section 3: Reference to H statement explanation in Section 016 information was added.

Section 3: Reference to R and H statement explanation in Section 16 information was deleted.

Section 3: Reference to section 15 for Nota info information was deleted.

Section 5: Fire - Advice for fire fighters information information was modified.

Section 5: Fire - Extinguishing media information information was modified.

Section 6: Accidental release personal information information was modified.

Section 7: Conditions safe storage information was modified.

Section 7: Precautions safe handling information information was modified.

Section 8: Appropriate Engineering controls information information was modified.

Section 8: BLV information was added.

Section 8: Eye/face protection text information was deleted.

Section 8: Occupational exposure limit table information was added.

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was added.

Section 8: Personal Protection - Eye information information was modified.

Section 8: Personal Protection - Respiratory Information information was modified.

Section 8: Personal Protection - Skin/hand information information was modified.

Section 8: STEL key information was added.

Section 8: TWA key information was added.

Section 9: Flash point information information was modified.

Section 9: Property description for optional properties information was added.

Section 9: Property description for optional properties information was deleted.

Section 9: Viscosity information information was modified.

Section 10: Hazardous decomposition products during combustion text information was added.

Section 11: Acute Toxicity table information was modified.

Section 11: Aspiration Hazard Table information was deleted.

Section 11: Aspiration Hazard text information was added.

Section 11: Carcinogenicity Table information was modified.

Section 11: Classification disclaimer information was added.

Section 11: Classification disclaimer information was deleted.

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- Section 11: Disclosed components not in tables text information was added.
- Section 11: Germ Cell Mutagenicity Table information was modified.
- Section 11: Health Effects Ingestion information information was modified.
- Section 11: Health Effects Inhalation information information was modified.
- Section 11: Health Effects Skin information information was modified.
- Section 11: Reproductive and/or Developmental Effects text information was added.
- Section 11: Reproductive Toxicity Table information was modified.
- Section 11: Respiratory Sensitization Table information was deleted.
- Section 11: Respiratory Sensitization text information was added.
- Section 11: Serious Eye Damage/Irritation Table information was modified.
- Section 11: Skin Corrosion/Irritation Table information was modified.
- Section 11: Skin Sensitization Table information was modified.
- Section 11: Specific Target Organ Toxicity single exposure text information was added.
- Section 11: Target Organs Repeated Table information was modified.
- Section 11: Target Organs Single Table information was deleted.
- Section 12: Acute aquatic hazard information information was deleted.
- Section 12: Chronic aquatic hazard information information was deleted.
- Section 12: Classification Warning information was added.
- Section 12: Classification Warning information was deleted.
- Section 12: Component ecotoxicity information information was modified.
- Section 12: Persistence and Degradability information information was modified.
- Section 12:Bioccumulative potential information information was modified.
- Section 13: 13.1. Waste disposal note information was modified.
- Section 13: Standard Phrase Category Waste GHS information was modified.
- Section 14: Transportation classification information was deleted.
- Section 16: List of relevant R phrase information information was deleted.
- Section 16: List of relevant R-phrases information was deleted.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.

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.

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