

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 Scotchkote Epoxy Coating 162PWX (For Blue) (Part B)

 Product Identification Numbers
 GR-2001-0177-6
 GR-2001-1814-3
 GR-2001-3958-6

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

Identified uses

Coating.

1.3. Details of the supplier of the substance or mixture

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

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

CLASSIFICATION:

Serious Eye Damage/Eye Irritation, Category 1 - Eye Dam. 1; H318 Skin Corrosion/Irritation, Category 1B - Skin Corr. 1B; H314 Skin Sensitization, Category 1 - Skin Sens. 1; H317

For full text of H phrases, see Section 16.

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive Indication of danger

Corrosive; C; R34

Sensitizing; R43

For full text of R phrases, see Section 16.

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

SIGNAL WORD DANGER!

Symbols: GHS05 (Corrosion) | GHS07 (Exclamation mark) |

Pictograms

H317



Ingredient	CAS Nbr
Trimethylhexane-1,6-diamine	25620-58-0
Diethylenetriamine	111-40-0

HAZARD STATEMENTS: H314

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

PRECAUTIONARY STATEMENTS

Prevention: P260 P280D	Do not breathe dust/fume/gas/mist/vapours/spray. Wear protective gloves, protective clothing, and eye/face protection.
Response:	
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTRE or doctor/physician.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

36% of the mixture consists of components of unknown acute oral toxicity. 51% of the mixture consists of components of unknown acute dermal toxicity.

Contains 40% of components with unknown hazards to the aquatic environment.

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Symbol(s)



% by Wt

5 - 15

< 5

Contains:

Diethylenetriamine; Trimethylhexane-1,6-diamine

Risk phrases R34 R43	Causes burns. May cause sensitisation by skin contact.
Safety phrases	Do not breathe vapour or spray.
S23C	Use only in well ventilated areas.
S51	Wear suitable protective clothing, gloves, and eye and face protection.
S36/37/39B	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S26	After contact with skin, wash immediately with plenty of water for 15 minutes.
S28C	In case of accident or if you feel unwell, seek medical advice immediately (show the label where
S45	possible).

2.3. Other hazards

May cause chemical gastrointestinal burns.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Calcium Carbonate	471-34-1	EINECS 207- 439-9	30 - 60	
Cashew, nutshell liquid, polymer with diethylenetriamine and formaldehyde	68413-29-6		15 - 40	
Trimethylhexane-1,6-diamine	25620-58-0	EINECS 247- 134-8	5 - 15	C:R34; Xn:R22; R43; R52/53 (Self Classified) Acute Tox. 4, H302; Skin Corr. 1B, H314; Skin Sens. 1, H317;
				Aquatic Chronic 3, H412 (Self Classified)
Non-Hazardous Ingredients	Mixture		1 - 5	
Diethylenetriamine	111-40-0	EINECS 203- 865-4	< 5	C:R34; Xn:R21-22; R43 (EU) R52/53 (Self Classified) Acute Tox. 4, H312; Acute Tox. 4, H302; Skin Corr. 1B, H314;
				Skin Sens. 1, H317 (CLP)
Toluene-4-sulphonic acid	104-15-4	EINECS 203- 180-0	< 5	Xi:R36-37-38 (EU)
				Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 (CLP)
29H,31H-phthalocyaninato(2-)- N29,N30,N31,N32 copper	147-14-8	EINECS 205- 685-1	1 - 4	
Quartz	14808-60-7	EINECS 238- 878-4	< 1	Xn:R48/20 (Vendor)
Discourse and anothing 16 for the full tout of an				STOT RE 1, H372 (Self Classified)

Please see section 16 for the full text of any R phrases and H statements referred to in this section Please refer to section 15 for the any applicable Notas that have been applied to the above components

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 flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Get immediate medical attention. Wash clothing before reuse.

Eye contact

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If swallowed

Rinse mouth. Do not induce vomiting. Get immediate 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

<u>Substance</u>	<u>Condition</u>
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.
Hydrogen Sulfide	During combustion.
Oxides of nitrogen.	During combustion.
Oxides of sulphur.	During combustion.

5.3. Advice for fire-fighters

No unusual fire or explosion hazards are anticipated.

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 vapours, in accordance with good industrial hygiene practice. Warning: A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. 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. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. 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

For industrial or professional use only. Do not use in a confined area with minimal air exchange. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. 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. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (eg. gloves, respirators...) as required.

7.2. Conditions for safe storage including any incompatibilities

Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from heat. Keep from freezing. Store away from acids. Store away from strong bases. Store away from oxidising agents.

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

Ingredient Diethylenetriamine	CAS Nbr 111-40-0	Agency Health and Safety Comm. (UK)	Limit type TWA:4.3 mg/m3(1 ppm)	Additional comments Skin Notation
Quartz	14808-60-7	Health and Safety Comm. (UK)	TWA(respirable):0.1 mg/m3	
Limestone	471-34-1	Health and Safety Comm. (UK)	TWA(as inhalable dust):10 mg/m3;TWA(as respirable dust):4 mg/m3;TWA(Inhalable):10 mg/m3;TWA(respirable):4 mg/m3	
Health and Safety Comm (UK) · UK Heal	th and Safety Cor	nmission		

Health and Safety Comm. (UK) : 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 general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

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: Full face shield. Indirect vented goggles.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Butyl rubber.

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Butyl rubber

Respiratory protection

In case of inadequate ventilation wear respiratory protection. An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure: Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	
Specific Physical Form	:
Appearance/Odour	
Odour threshold	
рН	
Boiling point/boiling ra	nge
Melting point	0
Flammability (solid, ga	s)
Explosive properties	,
Oxidising properties	
Flash point	
Autoignition temperatu	ire

Liquid. Thixotropic liquid. Ammonia odour Blue colour No data available. >= 200 °C Not applicable. Not applicable. Not classified Not classified >= 100 °C [Test Method:Closed Cup] >= 400 °C

Flammable Limits(LEL) Flammable Limits(UEL) Vapour pressure Relative density	Not applicable. Not applicable. No data available. 1.460 [Ref Std:WATER=1]
Water solubility	0 %
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Evaporation rate	No data available.
Vapour density	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Density	1.46 g/ml
9.2. Other information	
Volatile organic compounds (VOC)	0 g/l [Details: EPA Test Method 24]
Percent volatile	0%

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Avoid curing large quantities of material to prevent a premature reaction (exotherm) with production of intense heat and smoke.

10.5 Incompatible materials

Strong oxidising agents. Strong bases. Strong acids. Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup. Amines.

Condition

10.6 Hazardous decomposition products

Substance 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

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

Skin contact

Corrosive (skin burns): Signs/symptoms may include localised redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

Corrosive (eye burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Ingestion

May be harmful if swallowed.

Gastrointestinal corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea; blood in the faeces and/or vomitus may also be seen.

Carcinogenicity:

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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE3,593.6 mg/kg
Calcium Carbonate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Carbonate	Inhalation-	Rat	LC50 3.0 mg/l
	Dust/Mist		
	(4 hours)		
Calcium Carbonate	Ingestion	Rat	LD50 6,450 mg/kg
Trimethylhexane-1,6-diamine	Ingestion	Rat	LD50 910 mg/kg
Diethylenetriamine	Dermal	Rabbit	LD50 1,045 mg/kg
Diethylenetriamine	Ingestion	Rat	LD50 819 mg/kg
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Rat	LD50 10,000 mg/kg
Non-Hazardous Ingredients	Dermal	Rabbit	LD50 > 5,000 mg/kg
Non-Hazardous Ingredients	Inhalation-	Rat	LC50 > 0.691 mg/l
	Dust/Mist		
	(4 hours)		
Non-Hazardous Ingredients	Ingestion	Rat	LD50 > 5,110 mg/kg
Toluene-4-sulphonic acid	Dermal	Rabbit	LD50 2,000 mg/kg
Toluene-4-sulphonic acid	Inhalation-	Rat	LC50 207 mg/l
	Dust/Mist		
	(4 hours)		

Toluene-4-sulphonic acid	Ingestion	Rat	LD50 1,410 mg/kg
Quartz	Dermal		LD50 estimated to be $> 5,000 \text{ mg/kg}$
Quartz	Ingestion		LD50 estimated to be $> 5,000 \text{ mg/kg}$

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Trimethylhexane-1,6-diamine	Not	Corrosive
	available	
Diethylenetriamine	Rabbit	Corrosive
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	Rabbit	No significant irritation
Non-Hazardous Ingredients	Rabbit	No significant irritation
Quartz		No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Trimethylhexane-1,6-diamine	Rabbit	Corrosive
Diethylenetriamine	Rabbit	Corrosive
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	Rabbit	No significant irritation
Non-Hazardous Ingredients	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Trimethylhexane-1,6-diamine	Guinea	Sensitising
	pig	
Diethylenetriamine	Guinea	Sensitising
	pig	
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	Human	Not sensitizing
Non-Hazardous Ingredients	Human	Not sensitizing
	and	
	animal	

Respiratory Sensitisation

Name	Species	Value
Diethylenetriamine	Human	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
Trimethylhexane-1,6-diamine	In vivo	Not mutagenic
Diethylenetriamine	In Vitro	Not mutagenic
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	In Vitro	Not mutagenic
Non-Hazardous Ingredients	In Vitro	Not mutagenic
Quartz	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Diethylenetriamine	Dermal	Multiple	Not carcinogenic
		animal	
		species	
29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32 copper	Ingestion	Mouse	Not carcinogenic
Non-Hazardous Ingredients	Not	Mouse	Some positive data exist, but the data are not
	specified.		sufficient for classification
Quartz	Inhalation	Human	Carcinogenic.
		and	
		animal	

Reproductive Toxicity

Name	Route	Value	Species	Test result	Exposure Duration
Calcium Carbonate	Ingestion	Not toxic to development	Rat	NOAEL 625 mg/kg/day	premating & during gestation
Trimethylhexane-1,6-diamine	Ingestion	Not toxic to male reproduction	Rat	NOAEL 120 mg/kg/day	2 generation
Trimethylhexane-1,6-diamine	Ingestion	Not toxic to development	Rat	NOAEL 120 mg/kg/day	2 generation
Trimethylhexane-1,6-diamine	Ingestion	Some positive female reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 10 mg/kg/day	2 generation
Diethylenetriamine	Ingestion	Not toxic to male reproduction	Rat	NOAEL 300 mg/kg/day	28 days
Diethylenetriamine	Ingestion	Not toxic to development	Rat	NOAEL 300 mg/kg/day	premating & during gestation
Diethylenetriamine	Ingestion	Some positive female reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 30 mg/kg/day	premating & during gestation
29H,31H-phthalocyaninato(2-)- N29,N30,N31,N32 copper	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
29H,31H-phthalocyaninato(2-)- N29,N30,N31,N32 copper	Ingestion	Not toxic to male reproduction	Rat	NOAEL 1,000 mg/kg/day	42 days
29H,31H-phthalocyaninato(2-)- N29,N30,N31,N32 copper	Ingestion	Not toxic to development	Rat	NOAEL 1,000 mg/kg/day	premating & during gestation
Non-Hazardous Ingredients	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Non-Hazardous Ingredients	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Non-Hazardous Ingredients	Ingestion	Not toxic to development	Rat	NOAEL 1,350 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
Calcium Carbonate	Inhalation	respiratory system	All data are negative	Rat	NOAEL	90 minutes
			-		0.812 mg/l	
Diethylenetriamine	Inhalation	respiratory irritation	Some positive data exist, but the		NOAEL Not	
			data are not sufficient for		available	
			classification			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Trimethylhexane-1,6- diamine	Ingestion	hematopoietic system liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 180 mg/kg/day	13 weeks
Diethylenetriamine	Ingestion	endocrine system liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,210 mg/kg/day	90 days
29H,31H- phthalocyaninato(2-)- N29,N30,N31,N32 copper	Ingestion	endocrine system hematopoietic system respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	28 days
29H,31H- phthalocyaninato(2-)-	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for	Multiple animal	NOAEL Not available	not available

N29,N30,N31,N32 copper			classification	species		
Non-Hazardous	Inhalation	respiratory system	All data are negative	Human	NOAEL Not	occupational
Ingredients		silicosis			available	exposure
Quartz	Inhalation	silicosis	Causes damage to organs through	Human	NOAEL Not	occupational
			prolonged or repeated exposure		available	exposure

Aspiration Hazard

Name	Value

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

No product test data available.

Material	CAS Nbr	Organism	Туре	Exposure	Test endpoint	Test result
Calcium	471-34-1	Western	Experimental	96 hours	LC50	>100 mg/l
Carbonate		Mosquitofish	-			-
Diethylenetria	111-40-0	Water flea	Experimental	48 hours	EC50	16 mg/l
mine						
Diethylenetria	111-40-0	Green Algae	Experimental	96 hours	EC50	345.6 mg/l
mine						
Diethylenetria	111-40-0	Golden Orfe	Experimental	96 hours	LC50	248 mg/l
mine						
Toluene-4-	104-15-4	Golden Orfe	Experimental	96 hours	LC50	>325 mg/l
sulphonic acid						
Trimethylhexa	25620-58-0	Green algae	Experimental	72 hours	EC50	29.5 mg/l
ne-1,6-diamine		_	-			
Trimethylhexa	25620-58-0	Golden Orfe	Experimental	48 hours	LC50	172 mg/l
ne-1,6-diamine			-			-
Trimethylhexa	25620-58-0	Water flea	Experimental	24 hours	EC50	31.5 mg/l
ne-1,6-diamine						
Calcium	471-34-1	Rainbow trout	Experimental	21 days	NOEC	>100 mg/l
Carbonate						
Diethylenetria	111-40-0	Green algae	Experimental	72 hours	NOEC	10.2 mg/l
mine		_	-			
Diethylenetria	111-40-0	Three-spined	Experimental	28 days	NOEC	>10 mg/l
mine		stickleback	-			
Diethylenetria	111-40-0	Water flea	Experimental	21 days	NOEC	5.6 mg/l
mine			-			
29H,31H-	147-14-8		Data not			
phthalocyanina			available or			
to(2-)-			insufficient for			
N29,N30,N31,			classification			
N32 copper						

Cashew, nutshell liquid, polymer with diethylenetria mine and formaldehyde	68413-29-6	Data not available or insufficient for classification
Non- Hazardous Ingredients	Mixture	Data not available or insufficient for classification
Quartz	14808-60-7	Data not available or insufficient for classification

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Cashew, nutshell liquid, polymer with diethylenetria mine and formaldehyde	68413-29-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Non- Hazardous Ingredients	Mixture	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
29H,31H- phthalocyanina to(2-)- N29,N30,N31, N32 copper	147-14-8	Experimental Biodegradation	28 days	BOD	<1 % weight	Other methods
Calcium Carbonate	471-34-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Diethylenetria mine	111-40-0	Experimental Biodegradation	14 days	BOD	0 % weight	OECD 301C - MITI test (I)
Trimethylhexa ne-1,6-diamine	25620-58-0	Experimental Biodegradation	21 days	Dissolv. Organic Carbon Deplet	37 % weight	OECD 301E - Modified OECD Scre
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Toluene-4- sulphonic acid	104-15-4	Experimental Biodegradation	21 days	BOD	93 % weight	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Cashew,	68413-29-6	Data not	N/A	N/A	N/A	N/A
nutshell liquid,		available or				
polymer with		insufficient for				

diethylenetria mine and formaldehyde		classification				
Non- Hazardous Ingredients	Mixture	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
29H,31H- phthalocyanina to(2-)- N29,N30,N31, N32 copper	147-14-8	Experimental BCF-Carp	42 days	Bioaccumulati on factor	<11	OECD 305E - Bioaccumulation flow- through fish test
Calcium Carbonate	471-34-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Diethylenetria mine	111-40-0	Experimental BCF-Carp	42 days	Bioaccumulati on factor	6.3	OECD 305E - Bioaccumulation flow- through fish test
Trimethylhexa ne-1,6-diamine	25620-58-0	Experimental Bioconcentrati on		Log Kow	0.7	Other methods
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Toluene-4- sulphonic acid	104-15-4	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

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

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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)

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances
 20 01 27* Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

GR-2001-0177-6

ADR/RID: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., LIMITED QUANTITY, (TRIMETHYLHEXAMETHYLENEDIAMINE), (DIETHYLENETRIAMINE), 8, III, (E), ADR Classification Code: C7. IMDG-CODE: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), (DIETHYLENETRIAMINE), 8., III, IMDG-Code segregation code: 18-ALKALIS, LIMITED QUANTITY, EMS: FA, SB. ICAO/IATA: UN2735, POLYAMINES,LIQUID,CORROSIVE,N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), (DIETHYLENETRIAMINE), 8., III.

GR-2001-1814-3

ADR/RID: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), (DIETHYLENETRIAMINE), 8., III, (E), ADR Classification Code: C7. IMDG-CODE: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), (DIETHYLENETRIAMINE), 8., III, IMDG-Code segregation code: 18-ALKALIS, EMS: FA, SB. ICAO/IATA: UN2735, POLYAMINES,LIQUID,CORROSIVE,N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), (DIETHYLENETRIAMINE), 8., III, IMDG-Code segregation code: 18-

GR-2001-3958-6

ADR/RID: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), (DIETHYLENETRIAMINE), 8., III, (E), ADR Classification Code: C7. IMDG-CODE: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), (DIETHYLENETRIAMINE), 8., III, IMDG-Code segregation code: 18-ALKALIS, EMS: FA, SB. ICAO/IATA: UN2735, POLYAMINES,LIQUID,CORROSIVE,N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), (DIETHYLENETRIAMINE), 8., III, IMDG-Code segregation code: 18-

SECTION 15: Regulatory information

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

Carcinogenicity
Ingredient
Quartz

<u>CAS Nbr</u> 14808-60-7 <u>Classification</u> Grp. 1: Carcinogenic to humans

<u>Regulation</u> International Agency for Research on Cancer

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components

of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

List of relevant R-phrases

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R21	Harmful in contact with skin.
R22	Harmful if swallowed.
R34	Causes burns.
R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R43	May cause sensitisation by skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R52/53	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Revision information:

Revision Changes:

- Section 8: Skin protection recommended gloves information information was modified.
- Section 8: Respiratory protection recommended respirators information information was modified.
- Section 8: Personal Protection Skin/body information information was modified.
- Section 8: Skin protection protective clothing information information was modified.
- Section 1: Product identification numbers heading information was modified.
- Section 3: Composition/ Information of ingredients table information was modified.
- 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.

Copyright information was modified.

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

Label: CLP Precautionary - Response information was modified.

- Section 11: Acute Toxicity table information was modified.
- Section 11: Carcinogenicity Table information was modified.
- Section 11: Serious Eye Damage/Irritation Table information was modified.
- Section 11: Germ Cell Mutagenicity Table information was modified.
- Section 11: Skin Sensitization Table information was modified.
- Section 11: Respiratory Sensitization Table information was modified.
- Section 11: Reproductive Toxicity Table information was modified.
- Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Target Organs - Repeated Table information was modified.
Section 11: Target Organs - Single Table information was modified.
Section 8: Personal Protection - Eye information information was modified.
Section 8: Personal Protection - Skin/hand information information was modified.
Section 11: Disclosed components not in tables text information was added.
Section 8: 8.1.1 Biological limit values table heading information was added.
Section 8: BLV information was added.
Section 11: Aspiration Hazard Table information was deleted.

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 United Kingdom MSDSs are available at www.3M.com/uk