



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 Geopox GX014 Hardener

Product identification numbers

GR-2000-9987-1 GR-2001-0468-9

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

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

Indication of danger

Harmful; Xn; R22

Corrosive; C; R34

Sensitizing; R43

Dangerous for the environment; R52/53

For full text of R phrases, see Section 16.

2.2. Label elements

3M Scotchkote Geopox GX014 Hardener

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

Symbol(s)



Corrosive

Contains:

Trimethylhexane-1,6-diamine

Risk phrases

R22	Harmful if swallowed.
R34	Causes burns.
R43	May cause sensitisation by skin contact.
R52/53	Harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety phrases

S23	Do not breathe gas, fumes, vapour, or spray.
S51	Use only in well ventilated areas.
S36/37/39B	Wear suitable protective clothing, gloves, and eye and face protection.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28C	After contact with skin, wash immediately with plenty of water for 15 minutes.
S61	Avoid release to the environment. Refer to special instructions/safety data sheets.

2.3. Other hazards

Persons previously sensitised to amines may develop a cross-sensitisation reaction to certain other amines. May cause chemical gastrointestinal burns.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Kaolin	1332-58-7	EINECS 310-194-1	35 - 45	
Trimethylhexane-1,6-diamine	25620-58-0	EINECS 247-134-8	30 - 40	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)
Trimethylhexane diamine-epoxy adduct	Trade Secret		5 - 15	
Toluene-4-sulphonic acid	104-15-4	EINECS 203-180-0	5 - 15	Xi:R36-37-38 (EU) Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 (CLP)
Silicon dioxide	7631-86-9	EINECS 231-545-4	1 - 5	
Titanium dioxide	13463-67-7	EINECS 236-675-5	1 - 5	
Quartz	14808-60-7	EINECS 238-878-4	< 1	Xn:R48/20 (Vendor) STOT RE 1, H372 (Self Classified)

3M Scotchkote Geopox GX014 Hardener

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

3M Scotchkote Geopox GX014 Hardener

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. For large spills, if necessary, get assistance from professional spill clean up team. For small spills, carefully neutralise spill by adding appropriate dilute acid such as vinegar. Work slowly to avoid boiling or spattering. Continue to add neutralising agent until reaction stops. Let cool before collecting. 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 metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. 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. Cover, but do not seal for 48 hours. 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 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. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Keep away from reactive metals (eg. Aluminum, zinc etc.) to avoid the formation of hydrogen gas that could create an explosion hazard. Use personal protective equipment (eg. gloves, respirators...) as required.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Store away from heat. Keep from freezing. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from areas where product may come into contact with food or pharmaceuticals.

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	CAS Nbr	Agency	Limit type	Additional comments
Kaolin	1332-58-7	Health and Safety Comm. (UK)	TWA (as respirable dust): 2 mg/m ³	
Titanium dioxide	13463-67-7	Health and Safety Comm. (UK)	TWA(Inhalable):10 mg/m ³ ;TWA(respirable):4 mg/m ³	

3M Scotchkote Geopox GX014 Hardener

Quartz	14808-60-7	Health and Safety Comm. (UK)	TWA(respirable):0.1 mg/m3	
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Health and Safety Comm. (UK) : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

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

Wear 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. Wear protective gloves.

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

Neoprene.

Polymer laminate

Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Boot covers - Disposable

Coveralls - Disposable

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:

Full facepiece air-purifying respirator suitable for organic vapours and particulates

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	Liquid.
Specific Physical Form:	Thixotropic liquid.
Appearance/Odour	Ammoniacal odour; Off white colour
Odour threshold	<i>No data available.</i>
pH	12.8
Boiling point/boiling range	≥ 200 °C
Melting point	<i>No data available.</i>

3M Scotchkote Geopox GX014 Hardener

Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	200 °C [<i>Test Method</i> :Closed Cup]
Autoignition temperature	>=400 °C
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Vapour pressure	<=13.3 Pa
Relative density	1.33 [<i>Ref Std</i> :WATER=1]
Water solubility	Slight (less than 10%)
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Evaporation rate	<i>Not applicable.</i>
Vapour density	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
Viscosity	<i>No data available.</i>
Density	1.33 g/ml

9.2. Other information

Volatile organic compounds (VOC)	0 g/l [<i>Test Method</i> :Estimated] [<i>Details</i> :EU Definition (Part A and B mix)]
Percent volatile	0 % weight

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

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature reaction (exotherm) with production of intense heat and smoke.

10.5 Incompatible materials

Accelerators

Amines.

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

Strong acids.

Strong bases.

Strong oxidising agents.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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None known.	
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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.

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

Toxic 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.

Additional information:

Persons previously sensitised to amines may develop a cross-sensitisation reaction to certain other amines.

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 ATE50 - 300 mg/kg
Kaolin	Dermal		LD50 estimated to be > 5,000 mg/kg
Kaolin	Ingestion	Human	LD50 > 15,000 mg/kg
Trimethylhexane-1,6-diamine	Ingestion	Rat	LD50 910 mg/kg
Toluene-4-sulphonic acid	Dermal	Rabbit	LD50 2,000 mg/kg
Toluene-4-sulphonic acid	Inhalation-Dust/Mist (4 hours)	Rat	LC50 207 mg/l
Toluene-4-sulphonic acid	Ingestion	Rat	LD50 1,410 mg/kg
Trimethylhexane diamine-epoxy adduct	Dermal		LD50 estimated to be > 5,000 mg/kg

3M Scotchkote Geopox GX014 Hardener

Trimethylhexane diamine-epoxy adduct	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Titanium dioxide	Dermal	Rabbit	LD50 > 10,000 mg/kg
Titanium dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 6.82 mg/l
Titanium dioxide	Ingestion	Rat	LD50 > 10,000 mg/kg
Silicon dioxide	Dermal	Rabbit	LD50 > 5,000 mg/kg
Silicon dioxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Silicon dioxide	Ingestion	Rat	LD50 > 5,110 mg/kg
Quartz	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Kaolin		No significant irritation
Trimethylhexane-1,6-diamine	Not available	Corrosive
Toluene-4-sulphonic acid		Data not available or insufficient for classification
Trimethylhexane diamine-epoxy adduct		Data not available or insufficient for classification
Titanium dioxide	Rabbit	No significant irritation
Silicon dioxide	Rabbit	No significant irritation
Quartz		No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Kaolin		No significant irritation
Trimethylhexane-1,6-diamine	Rabbit	Corrosive
Toluene-4-sulphonic acid		Data not available or insufficient for classification
Trimethylhexane diamine-epoxy adduct		Data not available or insufficient for classification
Titanium dioxide	Rabbit	No significant irritation
Silicon dioxide	Rabbit	No significant irritation
Quartz		Data not available or insufficient for classification

Skin Sensitisation

Name	Species	Value
Kaolin		Data not available or insufficient for classification
Trimethylhexane-1,6-diamine	Guinea pig	Sensitising
Toluene-4-sulphonic acid		Data not available or insufficient for classification
Trimethylhexane diamine-epoxy adduct		Data not available or insufficient for classification
Titanium dioxide	Human and animal	Not sensitizing
Silicon dioxide	Human and animal	Not sensitizing
Quartz		Data not available or insufficient for classification

Respiratory Sensitisation

Name	Species	Value
Kaolin		Data not available or insufficient for classification
Trimethylhexane-1,6-diamine		Data not available or insufficient for classification
Toluene-4-sulphonic acid		Data not available or insufficient for classification
Trimethylhexane diamine-epoxy adduct		Data not available or insufficient for classification
Titanium dioxide		Data not available or insufficient for classification
Silicon dioxide		Data not available or insufficient for classification
Quartz		Data not available or insufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
Kaolin		Data not available or insufficient for classification
Trimethylhexane-1,6-diamine	In vivo	Not mutagenic

3M Scotchkote Geopox GX014 Hardener

Toluene-4-sulphonic acid		Data not available or insufficient for classification
Trimethylhexane diamine-epoxy adduct		Data not available or insufficient for classification
Titanium dioxide	In Vitro	Not mutagenic
Titanium dioxide	In vivo	Not mutagenic
Silicon dioxide	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
Kaolin	Inhalation	Multiple animal species	Not carcinogenic
Trimethylhexane-1,6-diamine			Data not available or insufficient for classification
Toluene-4-sulphonic acid			Data not available or insufficient for classification
Trimethylhexane diamine-epoxy adduct			Data not available or insufficient for classification
Titanium dioxide	Ingestion	Multiple animal species	Not carcinogenic
Titanium dioxide	Inhalation	Rat	Carcinogenic.
Silicon dioxide	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
Quartz	Inhalation	Human and animal	Carcinogenic.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Kaolin		Data not available or insufficient for classification			
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
Toluene-4-sulphonic acid		Data not available or insufficient for classification			
Trimethylhexane diamine-epoxy adduct		Data not available or insufficient for classification			
Titanium dioxide		Data not available or insufficient for classification			
Silicon dioxide	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silicon dioxide	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silicon dioxide	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Quartz		Data not available or insufficient for classification			

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Trimethylhexane-1,6-diamine			Data not available or insufficient for classification			
Toluene-4-sulphonic acid			Data not available or insufficient			

3M Scotchkote Geopox GX014 Hardener

			for classification			
Trimethylhexane diamine-epoxy adduct			Data not available or insufficient for classification			
Titanium dioxide			Data not available or insufficient for classification			
Silicon dioxide			Data not available or insufficient for classification			
Quartz			Data not available or insufficient for classification			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Kaolin	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL NA	occupational exposure
Kaolin	Inhalation	pulmonary fibrosis	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	
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
Toluene-4-sulphonic acid			Data not available or insufficient for classification			
Trimethylhexane diamine-epoxy adduct			Data not available or insufficient for classification			
Titanium dioxide	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 0.010 mg/l	2 years
Titanium dioxide	Inhalation	pulmonary fibrosis	All data are negative	Human	NOAEL Not available	occupational exposure
Silicon dioxide	Inhalation	respiratory system silicosis	All data are negative	Human	NOAEL Not available	occupational exposure
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

Name	Value
Kaolin	Not an aspiration hazard
Trimethylhexane-1,6-diamine	Not an aspiration hazard
Toluene-4-sulphonic acid	Not an aspiration hazard
Trimethylhexane diamine-epoxy adduct	Not an aspiration hazard
Titanium dioxide	Not an aspiration hazard
Silicon dioxide	Not an aspiration hazard
Quartz	Not an aspiration hazard

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	Type	Exposure	Test endpoint	Test result
Kaolin	1332-58-7		Data not			

3M Scotchkote Geopox GX014 Hardener

			available or insufficient for classification			
Trimethylhexane diamine-epoxy adduct	Trade Secret		Data not available or insufficient for classification			
Toluene-4-sulphonic acid	104-15-4	Golden Orfe	Experimental	96 hours	LC50	>325 mg/l
Quartz	14808-60-7		Data not available or insufficient for classification			
Silicon dioxide	7631-86-9		Data not available or insufficient for classification			
Titanium dioxide	13463-67-7	Sheepshead Minnow	Experimental	96 hours	LC50	>240 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	30 days	NOEC	3 mg/l
Titanium dioxide	13463-67-7	Fish	Experimental	30 days	NOEC	>=1,000 mg/l
Titanium dioxide	13463-67-7	Water flea	Experimental	48 hours	EC50	>100 mg/l
Titanium dioxide	13463-67-7	Crustacea other	Experimental	96 hours	EC50	>300 mg/l
Trimethylhexane-1,6-diamine	25620-58-0	Green algae	Experimental	72 hours	EC50	29.5 mg/l
Trimethylhexane-1,6-diamine	25620-58-0	Golden Orfe	Experimental	48 hours	LC50	172 mg/l
Trimethylhexane-1,6-diamine	25620-58-0	Water flea	Experimental	24 hours	EC50	31.5 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Trimethylhexane-1,6-diamine	25620-58-0	Experimental Biodegradation	21 days	Dissolv. Organic Carbon Deplet	37 % weight	OECD 301E - Modified OECD Scre
Trimethylhexane diamine-epoxy adduct	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Silicon dioxide	7631-86-9	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)
Titanium dioxide	13463-67-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Kaolin	1332-58-7	Data not	N/A	N/A	N/A	N/A

3M Scotchkote Geopox GX014 Hardener

		available or insufficient for classification				
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Silicon dioxide	7631-86-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Kaolin	1332-58-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Trimethylhexane diamine-epoxy adduct	Trade Secret	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
Titanium dioxide	13463-67-7	Experimental BCF - Other	42 days	Bioaccumulation factor	9.6	Other methods
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Trimethylhexane-1,6-diamine	25620-58-0	Experimental Bioconcentration		Log Kow	0.7	Other methods

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. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty

3M Scotchkote Geopox GX014 Hardener

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 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

SECTION 14: Transportation information

GR-2000-9987-1

ADR/RID: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), 8., III, (E), ADR Classification Code: C7.

IMDG-CODE: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), 8., III, IMDG-Code segregation code: 18- ALKALIS, EMS: FA,SB.

ICAO/IATA: FORBIDDEN: PACKAGE SIZE EXCEEDS IATA QUANTITY LIMITATIONS

GR-2001-0468-9

ADR/RID: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), 8., III, (E), ADR Classification Code: C7.

IMDG-CODE: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), 8., III, IMDG-Code segregation code: 18- ALKALIS, EMS: FA,SB.

ICAO/IATA: UN2735, POLYAMINES, LIQUID, CORROSIVE, N.O.S., (TRIMETHYLHEXAMETHYLENEDIAMINE), 8., III.

SECTION 15: Regulatory information

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

Carcinogenicity

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
Quartz	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer
Silicon dioxide	7631-86-9	Gr. 3: Not classifiable	International Agency for Research on Cancer
Titanium dioxide	13463-67-7	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Global inventory status

Contact 3M for more information.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

H302	Harmful if swallowed.
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

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:

Safety phrase information was modified.

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

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

Section 2: Indication of danger information information was modified.

Section 10: Conditions to avoid physical property information was modified.

Section 9: Flammability (solid, gas) information information was modified.

Copyright information was modified.

Section 8: Occupational exposure limit table information was modified.

Aspiration Hazard Table information was modified.

Section 11: Acute Toxicity table information was modified.

Carcinogenicity Table information was modified.

Serious Eye Damage/Irritation Table information was modified.

Germ Cell Mutagenicity Table information was modified.

Skin Sensitisation Table information was modified.

Respiratory Sensitisation Table information was modified.

Reproductive Toxicity Table information was modified.

Skin Corrosion/Irritation Table information was modified.

Target Organs - Repeated Table information was modified.

Target Organs - Single Table information was modified.

Section 11: Health Effects - Skin information information was modified.

Section 11: Health Effects - Ingestion information information was modified.

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

Section 6: Accidental release environmental information information was modified.

Section 6: Accidental release clean-up information information was modified.

Section 7: Conditions safe storage information was modified.

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

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

Section 8: Personal Protection - Respiratory 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 8: Respiratory protection - recommended respirators guide information was added.

Section 12: Component ecotoxicity information information was added.

Section 12: Persistence and Degradability information information was added.

Section 12:Biocumulative potential information information was added.
Section 12: Component Ecotoxicity table Material column header information was added.
Section 12: Component Ecotoxicity table CAS No column header information was added.
Section 12: Component Ecotoxicity table Organism column header information was added.
Section 12: Component Ecotoxicity table Type column header information was added.
Section 12: Component Ecotoxicity table Exposure column header information was added.
Section 12: Component Ecotoxicity table End point column header information was added.
Section 12: Component Ecotoxicity table Result column header information was added.
Section 12: Persistence and degradability table Material column header information was added.
Section 12: Persistence and degradability table CAS No column header information was added.
Section 12: Persistence and degradability table Test Type column header information was added.
Section 12: Persistence and degradability table Duration column header information was added.
Section 12: Persistence and degradability table Test Result column header information was added.
Section 12: Persistence and degradability table Protocol column header information was added.
Section 12:Biocumulative potential table Material column header information was added.
Section 12:Biocumulative potential table CAS No column header information was added.
Section 12:Biocumulative potential table CAS No column header information was added.
Section 12:Biocumulative potential table Test Result column header information was added.
Section 12:Biocumulative potential table Protocol column header information was added.
Section 12:Biocumulative potential table Test Type column header information was added.
Section 12: Persistence and degradability table Study Type column header information was added.
Section 12:Biocumulative potential table Test Type column header information was added.
Section 9: Odour Threshold information was added.
Section 9: Solubility (non-water) information was added.
Section 09: Decomposition Temperature information was added.
Section 10: Hazardous decomposition products during combustion text information was added.
Section 11: Disclosed components not in tables text information was added.
Section 2: R phrase reference information was added.
Label: Graphic information was added.
Label: Graphic information was added.
Label: Graphic Text information was added.
Section 9: Flammability (solid, gas) information information was added.
Section 8: Eye/face protection text information was deleted.
Section 8: Respiratory protection - recommended respirators information was deleted.
Section 2: Symbol information was deleted.
Section 2: Symbols heading information was deleted.
Section 12: Acute aquatic hazard information information was deleted.
Section 12: Chronic aquatic hazard heading information was deleted.
Section 12: Acute aquatic hazard heading information was deleted.
Section 12: Chronic aquatic hazard information information was deleted.
Prints No Data if Component ecotoxicity information is not present information was deleted.
Prints No Data if Persistence and Degradability information is not present information was deleted.
Prints No Data if Biocumulative potential information is not present information was deleted.
Section 8: mg/m³ key information was deleted.
Section 8: ppm key information was deleted.

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