

Safety Data Sheet

Copyright, 2020, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

 Document Group:
 08-8510-3
 Version Number:
 4.00

 Issue Date:
 29/04/2020
 Supercedes Date:
 23/04/2020

This Safety Data Sheet has been prepared in accordance with the Malaysia Occupational Safety and Health (Chemical Classification, Labelling and Safety Data Sheets) Regulations 2013.

SECTION 1: Identification

1.1. Product identifier

3MTM Fire Barrier Water Tight Sealant 1000 NS and 1003 SL

Product Identification Numbers

98-0400-5276-7 98-0400-5278-3 98-0400-5279-1 98-0400-5281-7 98-0400-5554-7 98-0400-5555-4 JE-4100-2480-4 XE-1014-8923-7 XE-1014-9424-5 XE-1014-9429-4

XE-1014-9444-3

1.2. Recommended use and restrictions on use

Recommended use

Fire Protection, This product is a watertight sealant that will help control the spread of fire, smoke and noxious gases.

1.3. Supplier's details

ADDRESS: 3M Malaysia Sdn. Bhd., Level 8, Block F, Oasis Square, No.2, Jalan PJU 1A/7A, Ara Damansara 47301

Petaling, Jaya, Selangor

Telephone: 03-7884 2888

E Mail: 3mmyehsr@mmm.com Website: www.3M.com.my

1.4. Emergency telephone number

+60 03-7884 2888

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Serious Eye Damage/Irritation: Category 2.

Skin Sensitizer: Category 1.

Chronic Aquatic Toxicity: Category 3.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark |

Pictograms



Hazard Statements

H319 Causes serious eye irritation. H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure:

blood or blood-forming organs

cardiovascular system

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

General:

P102 Keep out of reach of children.

P101 If medical advice is needed, have product container or label at hand.

Prevention:

P280E Wear protective gloves.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

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

Disposal:

P501 Dispose of contents/container in accordance with applicable

local/regional/national/international regulations.

2.3. Other hazards

Persons previously sensitized to amines may develop a cross-sensitization reaction to certain other amines.

This product may release methyl ethyl ketoxime (CAS 96-29-7) during curing and/or when exposed to water or humid air.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	C.A.S. No.	% by Wt
Calcium Carbonate	1317-65-3	15 - 40
Poly(Dimethylsiloxane)	63148-62-9	15 - 40
Siloxanes and Silcones, Di-Me, Hydroxy-	70131-67-8	15 - 40
Terminated		
Ketoxime Silane	22984-54-9	3 - 7
Amorphous Silica	7631-86-9	0.5 - 5.0
(Trimethoxysilylpropyl)Ethylenediamine	1760-24-3	0.5 - 1.0
Octamethylcyclotetrasiloxane	556-67-2	<= 0.1
Quartz silica	14808-60-7	<= 0.1

Any remaining components do not contribute to the hazards of this material.

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:

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Formaldehyde	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Oxides of Nitrogen	During Combustion

5.3. Special protective actions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

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 in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/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 oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required.

7.2. Conditions for safe storage including any incompatibilities

Store away from acids. Store away from strong bases. Store away from oxidizing agents.

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	C.A.S. No.	Agency	Limit type	Additional Comments
Calcium Carbonate	1317-65-3	Malaysia OELs	TWA (proposed)(8 hours):10	
			mg/m3	
Quartz silica	14808-60-7	ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
Quartz silica	14808-60-7	Malaysia OELs	TWA(respirable fraction)(8	
			hours):0.1 mg/m3	

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer's Recommended Guidelines

Malaysia OELs: Malaysia. Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations

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/vapors/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:

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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

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 - polymer laminate

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 vapors 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 stateSolidSpecific Physical Form:Paste

Color Gray
Odor Low Odor

Odor thresholdNo Data AvailablepHNo Data AvailableMelting point/Freezing pointNo Data AvailableBoiling point/Initial boiling point/Boiling rangeNot Applicable

Flash Point > 100 °C [Test Method:Closed Cup]

Evaporation rateNot ApplicableFlammability (solid, gas)Not ClassifiedFlammable Limits(LEL)Not ApplicableFlammable Limits(UEL)Not Applicable

 Vapor Pressure
 < 666.6 Pa [@ 25 °C]</td>

 Vapor Density
 >=1 [Ref Std: AIR=1]

Density 1.32 g/cm3

Relative Density 1.31 - 1.33 [*Ref Std*:WATER=1]

Water solubility Nil

Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNo Data AvailableViscosityNo Data AvailableMolecular weightNo Data Available

Volatile Organic Compounds <=4 % weight [*Test Method*:tested per EPA method 24] **VOC Less H2O & Exempt Solvents** <=53 g/l [*Test Method*:tested per EPA method 24]

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 polymerization will not occur.

10.4. Conditions to avoid

Not determined

10.5. Incompatible materials

Strong acids
Strong bases
Strong oxidizing agents

10.6. Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, 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:

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:

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion:

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

May cause additional health effects (see below).

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:

Cardiac Effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal.

Hematopoietic Effects: Signs/symptoms may include generalized weakness, fatigue and alterations in numbers of circulating blood cells.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Additional Information:

Persons previously sensitized to amines may develop a cross-sensitization 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	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Calcium Carbonate	Dermal	Rat	LD50 > 2,000 mg/kg
Calcium Carbonate	Inhalation- Dust/Mist (4 hours)	Rat	LC50 3 mg/l
Calcium Carbonate	Ingestion	Rat	LD50 6,450 mg/kg
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	Dermal	Rabbit	LD50 > 16,000 mg/kg
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	Ingestion	Rat	LD50 > 64,000 mg/kg
Poly(Dimethylsiloxane)	Dermal	Rabbit	LD50 > 19,400 mg/kg
Poly(Dimethylsiloxane)	Ingestion	Rat	LD50 > 17,000 mg/kg
Amorphous Silica	Dermal	Rabbit	LD50 > 5,000 mg/kg
Amorphous Silica	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Amorphous Silica	Ingestion	Rat	LD50 > 5,110 mg/kg
Ketoxime Silane	Dermal	Rat	LD50 > 2,000 mg/kg
Ketoxime Silane	Ingestion	Rat	LD50 2,260 mg/kg
(Trimethoxysilylpropyl)Ethylenediamine	Dermal	Rabbit	LD50 > 2,000 mg/kg
(Trimethoxysilylpropyl)Ethylenediamine	Inhalation- Dust/Mist (4 hours)	Rat	LC50 >1.49, <2.44 mg/l
(Trimethoxysilylpropyl)Ethylenediamine	Ingestion	Rat	LD50 1,897 mg/kg
Quartz silica	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz silica	Ingestion		LD50 estimated to be > 5,000 mg/kg
Octamethylcyclotetrasiloxane	Dermal	Rat	LD50 > 2,400 mg/kg
Octamethylcyclotetrasiloxane	Inhalation- Dust/Mist (4 hours)	Rat	LC50 36 mg/l
Octamethylcyclotetrasiloxane	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Skiii Collosion/Illitution		
Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Poly(Dimethylsiloxane)	Rabbit	No significant irritation
Amorphous Silica	Rabbit	No significant irritation
Ketoxime Silane	Rabbit	No significant irritation
(Trimethoxysilylpropyl)Ethylenediamine	Rabbit	Mild irritant
Octamethylcyclotetrasiloxane	Rabbit	Minimal irritation
Quartz silica	Professio	No significant irritation

	3M TM Fire	Barrier	Water	Tight	Sealant	1000	NS and	1003	SI
--	-----------------------	---------	-------	--------------	---------	------	--------	------	----

nal	
judgemen	
t	

Serious Eye Damage/Irritation

Name	Species	Value
Calcium Carbonate	Rabbit	No significant irritation
Poly(Dimethylsiloxane)	Rabbit	No significant irritation
Amorphous Silica	Rabbit	No significant irritation
Ketoxime Silane	Rabbit	Moderate irritant
(Trimethoxysilylpropyl)Ethylenediamine	Rabbit	Corrosive
Octamethylcyclotetrasiloxane	Rabbit	No significant irritation

Sensitization:

Skin Sensitization

Skiii Schsitization		
Name	Species	Value
	1 *	
Amorphous Silica	Human	Not classified
	and	
	animal	
Ketoxime Silane	Guinea	Sensitizing
	pig	
(Trimethoxysilylpropyl)Ethylenediamine	Multiple	Sensitizing
	animal	
	species	
Octamethylcyclotetrasiloxane	Human	Not classified
	and	
	animal	

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

Germ Cell Mutagenicity

Name	Route	Value		
	Y YY:			
Siloxanes and Silcones, Di-Me, Hydroxy-Terminated	In Vitro	Not mutagenic		
Amorphous Silica	In Vitro	Not mutagenic		
Ketoxime Silane	In Vitro	Not mutagenic		
Octamethylcyclotetrasiloxane	In Vitro	Some positive data exist, but the data are not		
		sufficient for classification		
Quartz silica	In Vitro	Some positive data exist, but the data are not		
		sufficient for classification		
Quartz silica	In vivo	Some positive data exist, but the data are not		
		sufficient for classification		

Carcinogenicity

Name	Route	Species	Value
Amorphous Silica	Not	Mouse	Some positive data exist, but the data are not
	Specified		sufficient for classification
Quartz silica	Inhalation	Human	Carcinogenic
		and	
		animal	

Reproductive Toxicity

Reproductive and/or Developmental Effects

reproductive and/or Development	ii Liicets				
Name	Route	Value	Species	Test Result	Exposure
					Duration
Calcium Carbonate	Ingestion	Not classified for development	Rat	NOAEL 625	premating &
				mg/kg/day	during

					gestation
Amorphous Silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Amorphous Silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Amorphous Silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Ketoxime Silane	Ingestion	Not classified for female reproduction	Rat	NOAEL 250 mg/kg/day	premating into lactation
Ketoxime Silane	Ingestion	Not classified for male reproduction	Rat	NOAEL 250 mg/kg/day	28 days
Ketoxime Silane	Ingestion	Not classified for development	Rat	NOAEL 250 mg/kg/day	premating into lactation
Octamethylcyclotetrasiloxane	Inhalation	Not classified for male reproduction	Rat	NOAEL 8.5 mg/l	2 generation
Octamethylcyclotetrasiloxane	Ingestion	Toxic to female reproduction	Rabbit	NOAEL 50 mg/kg/day	during organogenesis
Octamethylcyclotetrasiloxane	Inhalation	Toxic to female reproduction	Rat	NOAEL 3.6 mg/l	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

preme ranger organ romery single exposure							
Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration	
Calcium Carbonate	Inhalation	respiratory system	Not classified	Rat	NOAEL 0.812 mg/l	90 minutes	
Ketoxime Silane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available		

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Calcium Carbonate	Inhalation	respiratory system	Not classified	Human	NOAEL Not available	occupational exposure
Amorphous Silica	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Ketoxime Silane	Ingestion	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 10 mg/kg/day	28 days
Ketoxime Silane	Ingestion	endocrine system liver nervous system kidney and/or bladder	Not classified	Rat	NOAEL 250 mg/kg/day	28 days
(Trimethoxysilylpropyl)Et hylenediamine	Inhalation	respiratory system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.015 mg/l	90 days
Octamethylcyclotetrasilox ane	Dermal	hematopoietic system	Not classified	Rabbit	NOAEL 960 mg/kg/day	3 weeks
Octamethylcyclotetrasilox ane	Inhalation	liver	Not classified	Rat	NOAEL 8.5 mg/l	13 weeks
Octamethylcyclotetrasilox ane	Inhalation	endocrine system immune system kidney and/or bladder	Not classified	Rat	NOAEL 8.5 mg/l	2 generation
Octamethylcyclotetrasilox ane	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 8.5 mg/l	13 weeks
Octamethylcyclotetrasilox ane	Ingestion	liver	Not classified	Rat	NOAEL 1,600 mg/kg/day	2 weeks
Quartz silica	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

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

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

SECTION 12: Ecological information

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

12.1. Toxicity

Acute aquatic hazard:

Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:

GHS Chronic 3: Harmful to aquatic life with long lasting effects

No product test data available

Material	Cas #	Organism	Туре	Exposure	Test Endpoint	Test Result
Calcium Carbonate	1317-65-3	Green algae	Estimated	72 hours	Effect Concentration 50%	>100 mg/l
Calcium Carbonate	1317-65-3	Rainbow Trout	Estimated	96 hours	Lethal Concentration 50%	>100 mg/l
Calcium Carbonate	1317-65-3	Water flea	Estimated	48 hours	Effect Concentration 50%	>100 mg/l
Calcium Carbonate	1317-65-3	Green algae	Estimated	72 hours	Effect Concentration 10%	>100 mg/l
Poly(Dimethyls iloxane)			Data not available or insufficient for classification			
Siloxanes and Silcones, Di- Me, Hydroxy- Terminated	70131-67-8		Data not available or insufficient for classification			
Ketoxime Silane	22984-54-9	Green algae	Experimental	72 hours	Effect Concentration 50%	94 mg/l
Ketoxime Silane	22984-54-9	Rainbow Trout	Experimental	96 hours	Lethal Concentration 50%	>120 mg/l
Ketoxime Silane	22984-54-9	Water flea	Experimental	48 hours	Effect Concentration 50%	>120 mg/l
Ketoxime Silane	22984-54-9	Water flea	Estimated	21 days	No obs Effect Conc	>=100 mg/l

Ketoxime Silane	22984-54-9	Green algae	Experimental	72 hours	No obs Effect Conc	30 mg/l
Amorphous Silica	7631-86-9		Data not available or insufficient for classification			
(Trimethoxysil ylpropyl)Ethyle nediamine	1760-24-3	Fathead Minnow	Experimental	96 hours	Lethal Concentration 50%	168 mg/l
(Trimethoxysil ylpropyl)Ethyle nediamine	1760-24-3	Green Algae	Experimental	72 hours	Effect Concentration 50%	8.8 mg/l
(Trimethoxysil ylpropyl)Ethyle nediamine	1760-24-3	Water flea	Experimental	48 hours	Effect Concentration 50%	81 mg/l
(Trimethoxysil ylpropyl)Ethyle nediamine	1760-24-3	Green Algae	Experimental	72 hours	No obs Effect Conc	3.1 mg/l
Octamethylcycl otetrasiloxane	556-67-2	Rainbow Trout	Experimental	93 days	No obs Effect Conc	0.0044 mg/l
Octamethylcycl otetrasiloxane	556-67-2	Water flea	Experimental	21 days	No obs Effect Conc	0.0079 mg/l
Quartz silica	14808-60-7	Green Algae	Estimated	72 hours	Effect Concentration 50%	440 mg/l
Quartz silica	14808-60-7	Water flea	Estimated	48 hours	Effect Concentration 50%	7,600 mg/l
Quartz silica	14808-60-7	Zebra Fish	Estimated	96 hours	Lethal Concentration 50%	5,000 mg/l
Quartz silica	14808-60-7	Green Algae	Estimated	72 hours	No obs Effect Conc	60 mg/l

12.2. Persistence and degradability

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Calcium	1317-65-3	Data not			N/A	
Carbonate		availbl-				
		insufficient				
Poly(Dimethyls	63148-62-9	Data not			N/A	
iloxane)		availbl-				
·		insufficient				
Siloxanes and	70131-67-8	Data not			N/A	
Silcones, Di-		availbl-				
Me, Hydroxy-		insufficient				
Terminated						
Ketoxime	22984-54-9	Estimated		Hydrolytic	60 seconds (t	Other methods
Silane		Hydrolysis		half-life	1/2)	
Ketoxime	22984-54-9	Estimated	28 days	Dissolv.	0 % weight	OECD 301A - DOC
Silane		Biodegradation		Organic		Die Away Test
				Carbon Deplet		
Amorphous	7631-86-9	Data not			N/A	
Silica		availbl-				

		insufficient				
(Trimethoxysil	1760-24-3	Experimental		Hydrolytic	1.5 minutes (t	Other methods
ylpropyl)Ethyle		Hydrolysis		half-life	1/2)	
nediamine						
(Trimethoxysil	1760-24-3	Experimental	28 days	Dissolv.	39 % weight	Other methods
ylpropyl)Ethyle		Biodegradation		Organic		
nediamine				Carbon Deplet		
Octamethylcycl	556-67-2	Experimental		Photolytic half-	31 days (t 1/2)	Other methods
otetrasiloxane		Photolysis		life (in air)		
Octamethylcycl	556-67-2	Experimental		Hydrolytic	69.3-144 hours	Other methods
otetrasiloxane		Hydrolysis		half-life	(t 1/2)	
Octamethylcycl	556-67-2	Experimental	28 days	Carbon dioxide	3.7 % weight	OECD 310 CO2
otetrasiloxane		Biodegradation		evolution		Headspace
Quartz silica	14808-60-7	Data not			N/A	
		availbl-				
		insufficient				

12.3. Bioaccumulative potential

Material	CAS No.	Test Type	Duration	Study Type	Test Result	Protocol
Calcium Carbonate	1317-65-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Poly(Dimethyls iloxane)	63148-62-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Siloxanes and Silcones, Di- Me, Hydroxy- Terminated	70131-67-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Ketoxime Silane	22984-54-9	Estimated Bioconcentrati on		Log of Octanol/H2O part. coeff	<0.65	Other methods
Amorphous Silica	7631-86-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
(Trimethoxysil ylpropyl)Ethyle nediamine	1760-24-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Octamethylcycl otetrasiloxane	556-67-2	Experimental BCF - Fathead Mi	28 days	Bioaccumulatio n Factor	12400	Other methods
Quartz silica	14808-60-7	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 Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Disposal methods

According to the Environmental Quality (Scheduled Wastes) Regulations 2005, scheduled waste has to be sent to a prescribed premise for recycling, treatment or disposal. Please approach Kualiti Alam for proper schedule waste classification and disposal.

SECTION 14: Transport Information

Not hazardous for transportation.

Marine Transport (IMDG)

UN Number: None assigned.

Proper Shipping Name: None assigned.

Technical Name: None assigned.

Hazard Class/Division: None assigned.

Subsidiary Risk: None assigned.

Packing Group: None assigned.

Limited Quantity: None assigned. Marine Pollutant: None assigned.

Marine Pollutant Technical Name: None assigned.

Other Dangerous Goods Descriptions:

None assigned.

Air Transport (IATA)

UN Number: None assigned.

Proper Shipping Name: None assigned.

Technical Name: None assigned.

Hazard Class/Division: None assigned.

Subsidiary Risk: None assigned.

Packing Group: None assigned.

Limited Quantity: None assigned.

Marine Pollutant: None assigned.

Marine Pollutant Technical Name: None assigned.

Other Dangerous Goods Descriptions:

None assigned.

Transportation classifications are provided as a customer service. As for shipping, YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M's transportation classifications are based on product formulation, packaging, 3M policies and 3M's understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling or marking requirements. The above information is only for reference. If you are shipping by air or ocean, YOU are advised to check & meet applicable regulatory requirements.

SECTION 15: Regulatory information

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

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. 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. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

SECTION 16: Other information

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

3M Malaysia SDSs are available at www.3M.com.my