

Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the SS586 Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods.

Document group:	20-8777-3	Version number:	2.00
Issue Date:	18/03/2024	Supersedes date:	13/09/2022

IDENTIFICATION

1.1. Product identifier

3M[™] Imprint[™] 3 QuickStep Heavy Body Kit (10971/10971J)

1.2. Recommended use and restrictions on use

Recommended use

Dental product., Dental impression material.

Restrictions on use

For use by dental professionals only.

1.3. Supplier's details

Address:3M Technologies (S) Pte Ltd,10 Ang Mo Kio Street 65, Singapore 569059Telephone:+65 6450 8888Website:www.3m.com.sg

1.4. Emergency telephone number

Company Emergency Hotline: +65 6591 6601 (8.15am - 5.00pm, Monday - Friday)

This product is a kit or a multipart product which consists of multiple, independently packaged components. An SDS for each of these components is included. Please do not separate the component SDSs from this cover page. The document numbers of the SDSs for components of this product are:

20-8776-5, 20-8775-7

TRANSPORT INFORMATION

International Regulations

UN No.: None assigned UN Proper shipping name: None assigned Transportation Class (IMO): None assigned Other Dangerous Goods Descriptions (IMO): None assigned Other Dangerous Goods Descriptions (IATA): None assigned

Packing Group: None assigned Marine pollutant: None assigned

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 Singapore SDSs are available at www.3m.com.sg



Safety Data Sheet

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Document group:	20-8775-7	Version number:	1.00
Issue Date:	13/09/2022	Supersedes date:	Initial issue.

SECTION 1: Identification

1.1. Product identifier

3M[™] Imprint[™] 3 QuickStep Heavy Body Base

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Impression material

Restrictions on use

For use by dental professionals only.

1.3. Supplier's details

Address:3M Technologies (S) Pte Ltd,10 Ang Mo Kio Street 65, Singapore 569059Telephone:+65 6450 8888Website:www.3m.com.sg

1.4. Emergency telephone number

+65 6591 6888 (8.15am - 5.00pm, Monday - Friday)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

This product is not classified as hazardous per GHS criteria as implemented by Singapore Standard SS586.

2.2. Label elements SIGNAL WORD

Not applicable.

Symbols Not applicable.

Pictograms Not applicable.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt
Quartz	14808-60-7	45 - 55
VINYL POLYDIMETHYLSILOXANE	68083-19-2	25 - 35
METHYLHYDROGEN SILOXANE	None	10 - 20
SILANE TREATED SILICA	67762-90-7	5 - 10
Cobalt aluminate blue spinel	1345-16-0	< 0.5
Chromium (III) oxide	1308-38-9	< 0.5

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

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye contact

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

If swallowed

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

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

No critical symptoms or effects. 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

Sub	<u>stance</u>	
Car	bon monoxide.	
Car	bon dioxide.	

Condition

During combustion. 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

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

Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Chromium (III) oxide	1308-38-9	ACGIH	TWA(as Cr(III), inhalable	A4: Not class. as human
			fraction):0.003	carcin
			mg/m3;TWA(as Cr):0.5	
			mg/m3	
Chromium (III) oxide	1308-38-9	Singapore PELs	TWA(as Cr)(8 hours):0.5	
			mg/m3	
Cobalt, inorganic compounds	1345-16-0	ACGIH	TWA(as Co, inhalable	A3: Confirmed animal
			fraction):0.02 mg/m3;TWA(as	carcin.,
			Co):0.02 mg/m3	Dermal/Respiratory
				Sensitizer
Cobalt, inorganic compounds	1345-16-0	Singapore PELs	TWA(as Co)(8 hours):0.02	
			mg/m3	
Quartz	14808-60-7	ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
Quartz	14808-60-7	Singapore PELs	TWA(as respirable dust)(8	
			hours):0.1 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

Singapore PELs : Singapore. Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.	
Specific Physical Form:	Putty	
Color	Green	
Odor	Characteristic Odour	
Odour threshold	No data available.	
рН	Not applicable.	
Melting point/Freezing point	No data available.	
Boiling point/Initial boiling point/Boiling range	Not applicable.	
Flash point	No flash point	
Evaporation rate	Not applicable.	
Flammability (solid, gas)	Not classified	
Flammable Limits(LEL)	Not applicable.	
Flammable Limits(UEL)	Not applicable.	
Vapour pressure	Not applicable.	
Vapor Density and/or Relative Vapor Density	Not applicable.	
Density	>= 1 g/cm 3	
Relative density	≥ 1 [<i>Ref Std</i> :WATER=1]	
Water solubility	Nil	
Solubility- non-water	No data available.	
Partition coefficient: n-octanol/water	Not applicable.	
Autoignition temperature	Not applicable.	
Decomposition temperature	No data available.	
Viscosity/Kinematic Viscosity	No data available.	
Volatile organic compounds (VOC)	No data available.	
Percent volatile	No data available.	
VOC less H2O & exempt solvents	No data available.	
Molecular weight No data available.		

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability Stable.

10.3 Possibility of hazardous reactions Hazardous polymerisation will not occur.

10.4 Conditions to avoid None known.

10.5 Incompatible materials None known.

10.6 Hazardous decomposition products

Substance None known. **Condition**

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation

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

Skin contact

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

Eye contact

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

Ingestion

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

Additional Health Effects:

Carcinogenicity:

Exposures needed to cause the following health effect(s) are not expected during normal, intended use: Contains a chemical or chemicals which can cause cancer.

Toxicological Data

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Quartz	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz	Ingestion		LD50 estimated to be > 5,000 mg/kg
VINYL POLYDIMETHYLSILOXANE	Dermal	Rabbit	LD50 > 15,440 mg/kg
VINYL POLYDIMETHYLSILOXANE	Ingestion	Rat	LD50 > 15,440 mg/kg
SILANE TREATED SILICA	Dermal	Rabbit	LD50 > 5,000 mg/kg
SILANE TREATED SILICA	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
SILANE TREATED SILICA	Ingestion	Rat	LD50 > 5,110 mg/kg
Chromium (III) oxide	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Chromium (III) oxide	Inhalation- Dust/Mist (4 hours)	Rat	LC50 > 5.41 mg/l
Chromium (III) oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Cobalt aluminate blue spinel	Dermal	Professio nal judgeme nt	LD50 estimated to be > 5,000 mg/kg
Cobalt aluminate blue spinel	Ingestion	Rat	LD50 > 10,000 mg/kg
Cobalt aluminate blue spinel	Inhalation- Dust/Mist (4 hours)	similar compoun ds	LC50 > 5.06 mg/l

 $\overline{\text{ATE}}$ = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Quartz	Professio nal judgemen t	No significant irritation
VINYL POLYDIMETHYLSILOXANE	Rabbit	No significant irritation
SILANE TREATED SILICA	Rabbit	No significant irritation
Chromium (III) oxide	Rabbit	No significant irritation
Cobalt aluminate blue spinel	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
VINYL POLYDIMETHYLSILOXANE	Rabbit	Mild irritant
SILANE TREATED SILICA	Rabbit	No significant irritation
Chromium (III) oxide	Rabbit	No significant irritation
Cobalt aluminate blue spinel	In vitro	No significant irritation
	data	

Sensitization:

Skin Sensitisation

Name	Species	Value
SILANE TREATED SILICA	Human	Not classified
	and	
	animal	
Chromium (III) oxide	similar	Not classified
	compoun	
	ds	
Cobalt aluminate blue spinel	similar	Not classified
	compoun	

	ds	
Respiratory Sensitisation		
NY .	c •	X7 X

Name	Species	Value
Cobalt aluminate blue spinel	Professio nal judgemen t	Not classified

Germ Cell Mutagenicity

Name	Route	Value
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
SILANE TREATED SILICA	In Vitro	Not mutagenic
Chromium (III) oxide	In vivo	Not mutagenic
Chromium (III) oxide	In Vitro	Some positive data exist, but the data are not sufficient for classification
Cobalt aluminate blue spinel	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Quartz	Inhalation	Human	Carcinogenic.
		and	
		animal	
SILANE TREATED SILICA	Not specified.	Mouse	Some positive data exist, but the data are not sufficient for classification
Chromium (III) oxide	Ingestion	Rat	Not carcinogenic
Cobalt aluminate blue spinel	Inhalation	similar	Some positive data exist, but the data are not
		compoun	sufficient for classification
		ds	

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
SILANE TREATED SILICA	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
SILANE TREATED SILICA	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Chromium (III) oxide	Ingestion	Not classified for female reproduction	Rat	NOAEL 2,000 mg/kg/day	90 days
Chromium (III) oxide	Ingestion	Not classified for male reproduction	Rat	NOAEL 2,000 mg/kg/day	90 days
Chromium (III) oxide	Ingestion	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	90 days

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Chromium (III) oxide	Inhalation	respiratory system	Not classified	Rat	NOAEL 40	

mg	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
SILANE TREATED SILICA	Inhalation	respiratory system silicosis	Not classified	Human	NOAEL Not available	occupational exposure
Chromium (III) oxide	Inhalation	immune system respiratory system hematopoietic system liver kidney and/or bladder	Not classified	Rat	NOAEL 44 mg/m3	90 days

Aspiration Hazard

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

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

SECTION 12: Ecological information

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

12.1. Toxicity

Acute aquatic hazard:

GHS Acute 3: Harmful to aquatic life.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

Material	CAS Nbr	Organism	Туре	Exposure	Test endpoint	Test result
Quartz	14808-60-7	Green algae	Estimated	72 hours	EC50	440 mg/l
Quartz	14808-60-7	Water flea	Estimated	48 hours	EC50	7,600 mg/l
Quartz	14808-60-7	Zebra Fish	Estimated	96 hours	LC50	5,000 mg/l
Quartz	14808-60-7	Green algae	Estimated	72 hours	NOEC	60 mg/l
POLYDIMET HYLSILOXA NE	68083-19-2 67762-90-7		Data not available or insufficient for classification Data not available or insufficient for			N/A N/A
Chromium (III)	1308-38-9	Green algae	classification Estimated	72 hours	No tox obs at	>100 mg/l
oxide					lmt of water sol	
Chromium (III) oxide	1308-38-9	Water flea	Estimated	48 hours	No tox obs at lmt of water sol	>100 mg/l

Chromium (III)	1308-38-9	Zebra Fish	Experimental	96 hours	No tox obs at >100 mg/l
oxide					lmt of water sol
Chromium (III)	1308-38-9	Green algae	Estimated	72 hours	No tox obs at >100 mg/l
oxide					lmt of water sol
Chromium (III)	1308-38-9	Water flea	Estimated	21 days	No tox obs at >100 mg/l
oxide				-	lmt of water sol
Chromium (III)	1308-38-9	Zebra Fish	Estimated	30 days	No tox obs at >100 mg/l
oxide					lmt of water sol

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Quartz	14808-60-7	Data not available- insufficient	N/A	N/A	N/A	N/A
VINYL POLYDIMET HYLSILOXA NE	68083-19-2	Data not available- insufficient	N/A	N/A	N/A	N/A
SILANE TREATED SILICA	67762-90-7	Data not available- insufficient	N/A	N/A	N/A	N/A
Cobalt aluminate blue spinel	1345-16-0	Data not available- insufficient	N/A	N/A	N/A	N/A
Chromium (III) oxide	1308-38-9	Data not available- insufficient	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
VINYL POLYDIMET HYLSILOXA NE	68083-19-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
SILANE TREATED SILICA	67762-90-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Cobalt aluminate blue spinel	1345-16-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Chromium (III) oxide	1308-38-9	Estimated BCF - Other		Bioaccumulatio n factor	800	

12.4. Mobility in soil Please contact manufacturer for more details

12.5 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

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

Incinerate uncured product in a permitted waste incineration facility. Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste. 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.

SECTION 14: Transport Information

International Regulations

UN No.: None assigned UN Proper shipping name: None assigned

Transportation Class (IMO): None assignedTransportation Class (IATA): None assignedOther Dangerous Goods Descriptions (IMO):None assignedOther Dangerous Goods Descriptions (IATA):None assignedPacking Group: None assignedMarine pollutant: None assigned

SECTION 15: Regulatory information

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

Global inventory status

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

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.

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Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the SS586 Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods.

Document group:	20-8776-5	Version number:	2.00
Issue Date:	18/03/2024	Supersedes date:	12/09/2022

SECTION 1: Identification

1.1. Product identifier

3M[™] Imprint[™] 3 QuickStep Heavy Body Catalyst

1.2. Recommended use and restrictions on use

Recommended use

Dental Product, Impression material

Restrictions on use

For use by dental professionals only.

1.3. Supplier's details

Address:3M Technologies (S) Pte Ltd,10 Ang Mo Kio Street 65, Singapore 569059Telephone:+65 6450 8888Website:www.3m.com.sg

1.4. Emergency telephone number

+65 6591 6601 (8.15am - 5.00pm, Monday - Friday)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

This product is not classified as hazardous per GHS criteria as implemented by Singapore Standard SS586.

2.2. Label elements SIGNAL WORD

Not applicable.

Symbols Not applicable.

Pictograms Not applicable.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

Ingredient	CAS Nbr	% by Wt	
Quartz	14808-60-7	50 - 60	
Poly(Dimethylsiloxane)	63148-62-9	30 - 45	
Silane Treated Silica	68611-44-9	1 - 10	

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

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye contact

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

If swallowed

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

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

No critical symptoms or effects. 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> Carbon monoxide. Carbon dioxide. <u>Condition</u> During combustion. 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

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

Avoid prolonged or repeated skin contact. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Quartz	14808-60-7	ACGIH	TWA(respirable	A2: Suspected human
			fraction):0.025 mg/m3	carcin.
Quartz	14808-60-7	Singapore PELs	TWA(as respirable dust)(8	
			hours):0.1 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

Singapore PELs : Singapore. Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use in a well-ventilated area.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Skin/hand protection

See Section 7.1 for additional information on skin protection.

Respiratory protection

None required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Specific Physical Form:	Putty
Color	Green
Odor	Characteristic Odour
Odour threshold	No data available.
рН	Not applicable.
Melting point/Freezing point	No data available.
Boiling point/Initial boiling point/Boiling range	Not applicable.
Flash point	No flash point
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not classified
Flammable Limits(LEL)	Not applicable.
Flammable Limits(UEL)	Not applicable.
Vapour pressure	Not applicable.
Vapor Density and/or Relative Vapor Density	Not applicable.
Density	>= 1 g/cm3
Relative density	≥ 1 [<i>Ref Std</i> :WATER=1]
Water solubility	Nil
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	Not applicable.
Autoignition temperature	Not applicable.
Decomposition temperature	No data available.
Viscosity/Kinematic Viscosity	No data available.
Volatile organic compounds (VOC)	No data available.
Percent volatile	No data available.
VOC less H2O & exempt solvents	No data available.
Molecular weight	No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid None known.

10.5 Incompatible materials None known.

10.6 Hazardous decomposition products

Substance

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation

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

Skin contact

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

Eye contact

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

Ingestion

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

Additional Health Effects:

Carcinogenicity:

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

Contains a chemical or chemicals which can cause cancer.

Toxicological Data

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

Acute Toxicity

Route	Species	Value
Ingestion		No data available; calculated ATE >5,000 mg/kg
Dermal		LD50 estimated to be > 5,000 mg/kg
Ingestion		LD50 estimated to be > 5,000 mg/kg
Dermal	Rabbit	LD50 > 19,400 mg/kg
Ingestion	Rat	LD50 > 17,000 mg/kg
Dermal	Rabbit	LD50 > 5,000 mg/kg
Inhalation-	Rat	LC50 > 0.691 mg/l
Dust/Mist		
(4 hours)		
Ingestion	Rat	LD50 > 5,110 mg/kg
	Ingestion Dermal Ingestion Dermal Ingestion Dermal Inhalation- Dust/Mist (4 hours)	Ingestion Dermal Ingestion Dermal Rabbit Ingestion Rat Dermal Rabbit Inhalation- Dust/Mist (4 hours)

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value

Quartz	Professio nal judgemen t	No significant irritation
Poly(Dimethylsiloxane)	Rabbit	No significant irritation
Silane Treated Silica	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Poly(Dimethylsiloxane)	Rabbit	No significant irritation
Silane Treated Silica	Rabbit	No significant irritation

Sensitization:

Skin Sensitisation

Name	Species	Value
Silane Treated Silica	Human and animal	Not classified

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
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
Silane Treated Silica	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Quartz	Inhalation	Human	Carcinogenic.
		and	
		animal	
Silane Treated Silica	Not	Mouse	Some positive data exist, but the data are not
	specified.		sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Silane Treated Silica	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Silane Treated Silica	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Silane Treated Silica	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

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

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
Silane Treated Silica	Inhalation	respiratory system silicosis	Not classified	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 labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

Material	CAS Nbr	Organism	Туре	Exposure	Test endpoint	Test result
Quartz	14808-60-7	Green algae	Estimated	72 hours	EC50	440 mg/l
Quartz	14808-60-7	Water flea	Estimated	48 hours	EC50	7,600 mg/l
Quartz	14808-60-7	Zebra Fish	Estimated	96 hours	LC50	5,000 mg/l
Quartz	14808-60-7	Green algae	Estimated	72 hours	NOEC	60 mg/l
Poly(Dimethylsilox ane)	63148-62-9	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
Silane Treated Silica	68611-44-9	N/A	Data not available or insufficient for classification	N/A	N/A	N/A

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Quartz	14808-60-7	Data not available- insufficient	N/A	N/A	N/A	N/A
Poly(Dimethylsilox ane)	63148-62-9	Data not available- insufficient	N/A	N/A	N/A	N/A
Silane Treated Silica	68611-44-9	Data not available- insufficient	N/A	N/A	N/A	N/A

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Quartz	14808-60-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Poly(Dimethylsilox ane)	63148-62-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Silane Treated Silica	68611-44-9	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

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

Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

SECTION 14: Transport Information

International Regulations

UN No.: None assigned UN Proper shipping name: None assigned

Transportation Class (IMO): None assignedTransportation Class (IATA): None assignedOther Dangerous Goods Descriptions (IMO):None assignedOther Dangerous Goods Descriptions (IATA):None assignedPacking Group: None assignedMarine pollutant: None assigned

SECTION 15: Regulatory information

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

Global inventory status

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

This product may contain component(s) that are regulated by the following:

Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations: this product is subject to SDS, labelling, PEL and other requirements in the Act/Regulations.

Environmental Protection and Management (Hazardous Substances) Regulations: This product is subject to the requirements in the Regulations

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 Singapore SDSs are available at www.3m.com.sg