Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

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

1.1. Product identifier
Beyond Ceramic Coating M888

Product Identification Numbers
14-1001-4813-0

7100322751

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

Identified uses
Automotive.

1.3. Details of the supplier of the safety data sheet

Address:	Meguiars United Kingdom Limited, 3 Lamport Court, Heartlands, Daventry, Northants, NN11 8UF
Telephone:	+44 (0)870 241 6696
E Mail:	info@meguiars.co.uk
Website:	www.meguiars.co.uk

1.4. Emergency telephone number
+44 (0)870 241 6696

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture
The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

CLASSIFICATION:
Flammable Liquid, Category 3 - Flam. Liq. 3; H226
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336
Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

2.2. Label elements
The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

SIGNAL WORD
WARNING.

Symbols
GHS02 (Flame) |GHS07 (Exclamation mark) |

Pictograms

Ingredient	CAS Nbr	EC No.	% by Wt
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	242-272-5	10 - 30

HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261G	Avoid breathing vapours or dust.

Response:

P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

77% of the mixture consists of components of unknown acute oral toxicity.
77% of the mixture consists of components of unknown acute dermal toxicity.
77% of the mixture consists of components of unknown acute inhalation toxicity.
Contains 77% of components with unknown hazards to the aquatic environment.

2.3. Other hazards

Contains a substance that meets the criteria for PBT according to Regulation (EC) No 1907/2006, Annex XIII, as amended by UK REACH Regulations SI 2019/758 Contains a substance that meets the criteria for vPvB according to Regulation (EC) No 1907/2006, Annex XIII, as amended by UK REACH Regulations SI 2019/758

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP], as amended for GB
Functional silicon polymer	Trade Secret	60 - 80	Substance not classified as hazardous
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	(CAS-No.) 18395-30-7 (EC-No.) 242-272-5	10 - 30	Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	(CAS-No.) 13497-18-2 (EC-No.) 236-818-1	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319
methanol	(CAS-No.) 67-56-1 (EC-No.) 200-659-6	< 0.25	Flam. Liq. 2, H225 Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 3, H301 STOT SE 1, H370
octamethylcyclotetrasiloxane	(CAS-No.) 556-67-2 (EC-No.) 209-136-7	< 0.1	Repr. 2, H361f Aquatic Chronic 1, H410,M=10 Flam. Liq. 3, H226

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

Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits
methanol	(CAS-No.) 67-56-1 (EC-No.) 200-659-6	(C >= 10%) STOT SE 1, H370 (3% =< C < 10%) STOT SE 2, H371

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation
Remove person to fresh air. If you feel unwell, get medical attention.

Skin contact
Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact
If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, 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
The most important symptoms and effects based on the GB CLP classification include:
Irritation to the skin (localized redness, swelling, itching, and dryness). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

4.3. Indication of any immediate medical attention and special treatment required
Not applicable.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media
DO NOT USE WATER In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture
Closed containers exposed to heat from fire may build pressure and explode.

5.3. Advice for fire-fighters
Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up
Contain spill. Cover spill area with a fire-extinguishing foam. 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 using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections
Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep out of reach of children. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing 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. Avoid release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (eg. gloves, respirators…) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities
Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)
See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits
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
methanol	67-56-1	UK HSC	TWA:266 mg/m3(200 ppm);STEL:333 mg/m3(250 ppm)	SKIN

UK HSC : UK Health and Safety Commission
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

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

8.2. Exposure controls

8.2.1. Engineering controls
Use 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. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection
None required.

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:

Material	Thickness (mm)	Breakthrough Time
Butyl rubber.	0.5	=>8 hours
Polymer laminate	>0.30	=>8 hours
Fluoroelastomer	0.4	4-8 hours

The glove data presented are based on the substance driving dermal toxicity and the conditions present at the time of testing. Breakthrough time may be altered when the glove is subjected to use conditions that place additional stress on the glove.

Applicable Norms/Standards
Use gloves tested to EN 374

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 supplied-air respirator
Organic vapour respirators may have short service life.

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

Applicable Norms/Standards
Use a respirator conforming to EN 140 or EN 136

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless
Odor	Minty
Odour threshold	*No data available.*
Melting point/freezing point	*Not applicable.*
Boiling point/boiling range	47.2 ºC
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	0.92 % volume
Flammable Limits(UEL)	16 % volume
Flash point	32 ºC [*Test Method:*Closed Cup]
Autoignition temperature	267 ºC
Decomposition temperature	*No data available.*
pH	*substance/mixture is non-soluble (in water)*
Kinematic Viscosity	210 mm²/sec
Water solubility	Immiscible
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Vapour pressure	*No data available.*
Density	0.97 g/ml
Relative density	0.97
Relative Vapour Density	> 1

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	195.8 g/l [*Test Method:*Estimated]
Evaporation rate	< 1

Percent volatile	20.2 % [*Test Method:*Estimated]

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.
Sparks and/or flames.

10.5 Incompatible materials
None known.

10.6 Hazardous decomposition products

Substance	Condition
None known.	

SECTION 11: Toxicological information

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

11.1. Information on hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

Signs and Symptoms of Exposure

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

Inhalation
May be harmful if inhaled. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact
May be harmful in contact with skin. Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain. May cause additional health effects (see below).

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

Ingestion
May be harmful if swallowed.
Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:
Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Reproductive/Developmental Toxicity:
Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

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 >2,000 - =5,000 mg/kg
Overall product	Inhalation-Vapour(4 hr)		No data available; calculated ATE >20 - =50 mg/l
Overall product	Ingestion		No data available; calculated ATE >2,000 - =5,000 mg/kg
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Dermal	Professional judgement	LD50 estimated to be 2,000 - 5,000 mg/kg
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Inhalation-Vapour (4 hours)	Rat	LC50 > 11 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Ingestion	Rat	LD50 > 2,000 mg/kg
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	Dermal	Rat	LD50 > 2,000 mg/kg
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	Ingestion	Rat	LD50 3,657 mg/kg
methanol	Dermal		LD50 estimated to be 1,000 - 2,000 mg/kg
methanol	Inhalation-Vapour		LC50 estimated to be 10 - 20 mg/l
methanol	Ingestion		LD50 estimated to be 50 - 300 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

Name	Species	Value
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Rabbit	Irritant
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	Rabbit	Irritant
methanol	Rabbit	Mild irritant
octamethylcyclotetrasiloxane	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Rabbit	No significant irritation
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	Rabbit	Severe irritant
methanol	Rabbit	Moderate irritant
octamethylcyclotetrasiloxane	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value

SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Guinea pig	Not classified
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	Guinea pig	Not classified
methanol	Guinea pig	Not classified
octamethylcyclotetrasiloxane	Human and animal	Not classified

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	In Vitro	Not mutagenic
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	In vivo	Not mutagenic
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	In Vitro	Not mutagenic
methanol	In Vitro	Some positive data exist, but the data are not sufficient for classification
methanol	In vivo	Some positive data exist, but the data are not sufficient for classification
octamethylcyclotetrasiloxane	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
methanol	Inhalation	Multiple animal species	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
methanol	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,600 mg/kg/day	21 days
methanol	Ingestion	Toxic to development	Mouse	LOAEL 4,000 mg/kg/day	during organogenesis
methanol	Inhalation	Toxic to development	Mouse	NOAEL 1.3 mg/l	during organogenesis
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

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL not available	
SILANE, TRIMETHOXY(2-	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for	similar health	NOAEL not available	

METHYLPROPYL)-			classification	hazards		
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Rat	NOAEL not available	
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL not available	
methanol	Inhalation	blindness	Causes damage to organs	Human	NOAEL Not available	occupational exposure
methanol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	not available
methanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL Not available	6 hours
methanol	Ingestion	blindness	Causes damage to organs	Human	NOAEL Not available	poisoning and/or abuse
methanol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
methanol	Inhalation	liver	Not classified	Rat	NOAEL 6.55 mg/l	4 weeks
methanol	Inhalation	respiratory system	Not classified	Rat	NOAEL 13.1 mg/l	6 weeks
methanol	Ingestion	liver | nervous system	Not classified	Rat	NOAEL 2,500 mg/kg/day	90 days
octamethylcyclotetrasiloxane	Dermal	hematopoietic system	Not classified	Rabbit	NOAEL 960 mg/kg/day	3 weeks
octamethylcyclotetrasiloxane	Inhalation	liver	Not classified	Rat	NOAEL 8.5 mg/l	13 weeks
octamethylcyclotetrasiloxane	Inhalation	endocrine system | immune system | kidney and/or bladder	Not classified	Rat	NOAEL 8.5 mg/l	2 generation
octamethylcyclotetrasiloxane	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 8.5 mg/l	13 weeks
octamethylcyclotetrasiloxane	Ingestion	liver	Not classified	Rat	NOAEL 1,600 mg/kg/day	2 weeks

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

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

11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

SECTION 12: Ecological information

The information below may not agree with the material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
Functional silicon polymer	Trade Secret	N/A	Data not available or insufficient for classification	N/A	N/A	N/A
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Green algae	Experimental	72 hours	EC50	>1,170 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Water flea	Experimental	48 hours	EC50	>864 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Zebra Fish	Experimental	96 hours	LC50	>100 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Green algae	Experimental	72 hours	NOEC	221 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Activated sludge	Analogous Compound	3 hours	NOEC	1,000 mg/l
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Cress	Experimental	17 days	NOEC	>=100 mg/kg (Dry Weight)
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	13497-18-2	Copepod	Experimental	48 hours	EC50	>151.9 mg/l
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	13497-18-2	Diatom	Experimental	72 hours	ErC50	125 mg/l
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	13497-18-2	Turbot	Experimental	96 hours	LC50	>200 mg/l
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	13497-18-2	Diatom	Experimental	72 hours	ErC10	68 mg/l
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	13497-18-2	Activated sludge	Analogous Compound	3 hours	EC50	1,000 mg/l
methanol	67-56-1	Algae or other aquatic plants	Experimental	96 hours	EC50	16.9 mg/l
methanol	67-56-1	Bay mussel	Experimental	96 hours	LC50	15,900 mg/l
methanol	67-56-1	Bluegill	Experimental	96 hours	LC50	15,400 mg/l
methanol	67-56-1	Green algae	Experimental	96 hours	ErC50	22,000 mg/l
methanol	67-56-1	Sediment organism	Experimental	96 hours	LC50	54,890 mg/l
methanol	67-56-1	Water flea	Experimental	48 hours	LC50	3,289 mg/l
methanol	67-56-1	Green algae	Experimental	96 hours	NOEC	9.96 mg/l

methanol	67-56-1	Medaka	Experimental	8.33 days	NOEC	158,000 mg/l
methanol	67-56-1	Water flea	Experimental	21 days	NOEC	122 mg/l
methanol	67-56-1	Activated sludge	Experimental	3 hours	IC50	>1,000 mg/l
methanol	67-56-1	Barley	Experimental	14 days	EC50	15,492 mg/kg (Dry Weight)
methanol	67-56-1	Redworm	Experimental	63 days	EC50	26,646 mg/kg (Dry Weight)
methanol	67-56-1	Springtail	Experimental	28 days	EC50	5,683 mg/kg (Dry Weight)
octamethylcyclotetrasiloxane	556-67-2	Blackworm	Experimental	28 days	NOEC	0.73 mg/kg (Dry Weight)
octamethylcyclotetrasiloxane	556-67-2	Midge	Experimental	14 days	LC50	>170 mg/kg (Dry Weight)
octamethylcyclotetrasiloxane	556-67-2	Mysid Shrimp	Experimental	96 hours	LC50	>0.0091 mg/l
octamethylcyclotetrasiloxane	556-67-2	Rainbow trout	Experimental	96 hours	LC50	>0.022 mg/l
octamethylcyclotetrasiloxane	556-67-2	Water flea	Experimental	48 hours	EC50	>0.015 mg/l
octamethylcyclotetrasiloxane	556-67-2	Rainbow trout	Experimental	93 days	NOEC	0.0044 mg/l
octamethylcyclotetrasiloxane	556-67-2	Water flea	Experimental	21 days	NOEC	0.015 mg/l
octamethylcyclotetrasiloxane	556-67-2	Activated sludge	Experimental	3 hours	EC50	>10,000 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Functional silicon polymer	Trade Secret	Data not availbl-insufficient	N/A	N/A	N/A	N/A
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Experimental Biodegradation	28 days	CO2 evolution	47 %CO2 evolution/THCO2 evolution	OECD 301B - Modified sturm or CO2
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Transformation product Biodegradation	14 days	BOD	92 %BOD/ThOD	OECD 301C - MITI test (I)
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Modeled Hydrolysis		Hydrolytic half-life	4.1 hours (t 1/2)	Catalogic™
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	13497-18-2	Experimental Biodegradation	28 days	BOD	57 %BOD/ThOD	OECD 301C - MITI test (I)
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	13497-18-2	Experimental Aquatic Inherent Biodegrad.	60 days	Percent degraded	71 %BOD/ThOD	OECD 306(Misc)-Biodegrad. Seaw
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	13497-18-2	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	< 12 hours (t 1/2)	
methanol	67-56-1	Experimental Biodegradation	3 days	Percent degraded	91 %degraded	
methanol	67-56-1	Experimental Biodegradation	14 days	BOD	92 %BOD/ThOD	OECD 301C - MITI test (I)
methanol	67-56-1	Experimental Photolysis		Photolytic half-life (in air)	35 days (t 1/2)	

methanol	67-56-1	Experimental Soil Metabolism Aerobic	5 days	CO2 evolution	53.4 %CO2 evolution/THCO2 evolution	
octamethylcyclotetrasiloxane	556-67-2	Experimental Biodegradation	29 days	CO2 evolution	3.7 %CO2 evolution/THCO2 evolution	OECD 310 CO2 Headspace
octamethylcyclotetrasiloxane	556-67-2	Experimental Photolysis		Photolytic half-life (in air)	31 days (t 1/2)	
octamethylcyclotetrasiloxane	556-67-2	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	69.3-144 hours (t 1/2)	OECD 111 Hydrolysis func of pH

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Functional silicon polymer	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Transformation product Bioconcentration		Log Kow	-0.77	
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Modeled Bioconcentration		Log Kow	0.7	Episuite™
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Transformation product Bioconcentration		Log Kow	-1.0	Episuite™
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	13497-18-2	Modeled Bioconcentration		Log Kow	1.7	Episuite™
methanol	67-56-1	Experimental BCF - Fish	3 days	Bioaccumulation factor	<4.5	
methanol	67-56-1	Experimental Bioconcentration		Log Kow	-0.77	
octamethylcyclotetrasiloxane	556-67-2	Experimental BCF - Fish	28 days	Bioaccumulation factor	12400	40CFR 797.1520-Fish Bioaccumm
octamethylcyclotetrasiloxane	556-67-2	Experimental Bioconcentration		Log Kow	6.49	OECD 123 log Kow slow stir

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Transformation product Mobility in Soil	Koc	2.8 l/kg	
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Transformation product Mobility in Soil	Koc	200 l/kg	Episuite™
SILANE, TRIMETHOXY(2-METHYLPROPYL)-	18395-30-7	Modeled Mobility in Soil	Koc	2,000 l/kg	Episuite™
1-Propanamine, 3-(triethoxysilyl)-N-[3-(triethoxysilyl)propyl]-	13497-18-2	Experimental Mobility in Soil	Koc	≤ 1574 l/kg	OECD 106 Adsp-Desb Batch Equil
methanol	67-56-1	Experimental Mobility in Soil	Koc	0.13 l/kg	
octamethylcyclotetr	556-67-2	Experimental	Koc	16,600 l/kg	OECD 106 Adsp-Desb Batch

asiloxane		Mobility in Soil			Equil

12.5. Results of the PBT and vPvB assessment

Ingredient	CAS Nbr	PBT/vPvB status
octamethylcyclotetrasiloxane	556-67-2	Meets UK REACH PBT criteria
octamethylcyclotetrasiloxane	556-67-2	Meets UK REACH vPvB criteria

12.6. Other adverse effects

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose of contents/ container in accordance with the local/regional/national/international regulations.

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

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of the manufacturer, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/CE 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)

070601* Aqueous washing liquids and mother liquors
08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	UN1993	UN1993	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL)	FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL)	FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL)
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	III	III	III
14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II	No data available.	No data available.	No data available.

of Marpol 73/78 and IBC Code			
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Classification Code	F1	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

SECTION 15: Regulatory information

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

Restrictions on the manufacture, placing on the market and use:
The following substance(s) contained in this product is/are subject to Annex XVII of regulation (EC) 1907/2006, as amended for GB, with regard to restrictions on the manufacture, placing on the market and use when present in certain dangerous conditions. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

Ingredient	CAS Nbr
methanol	67-56-1
octamethylcyclotetrasiloxane	556-67-2

Restriction status: listed in UK REACH Annex XVII
Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 as amended for Great Britain for Conditions of Restriction

Authorisation status under UK REACH:
The following substance/s contained in this product might be or is/are subject to authorisation in accordance with UK REACH:

Ingredient	CAS Nbr
octamethylcyclotetrasiloxane	556-67-2

Authorisation status: listed in the UK REACH Candidate List of Substances of Very High Concern for Authorisation

Global inventory status
Contact manufacturer for more information 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.

COMAH Regulation, SI 2015/483
Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements
P5c FLAMMABLE LIQUIDS*	5000	50000

*If maintained at a temperature above its boiling point or if particular processing conditions, such as high pressure or high temperature, may create major-accident hazards, P5a or P5b FLAMMABLE LIQUIDS may apply
Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
methanol	67-56-1	500	5000
octamethylcyclotetrasiloxane	556-67-2	100	200

Regulation (EU) No 649/2012, as amended for GB
No chemicals listed

15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended for GB.

SECTION 16: Other information

List of relevant H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H370	Causes damage to organs.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Revision information:
Section 01: SAP Material Numbers information was added.
Section 14 Classification Code – Regulation Data information was modified.
Section 14 Hazard Class + Sub Risk – Regulation Data information was modified.
Section 14 Hazardous/Not Hazardous for Transportation information was modified.
Section 14 Other Dangerous Goods – Regulation Data information was modified.
Section 14 Packing Group – Regulation Data information was modified.
Section 14 Proper Shipping Name information was modified.
Section 14 Segregation – Regulation Data information was modified.
Section 14 UN Number Column data information was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

Meguiar's, Inc. SDSs for Great Britain are available at www.meguiars.co.uk
For Northern Ireland documents, please contact your 3M representative to obtain a copy.