



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

1.1. Product identifier

3M Perfect-It III 50383 and 51302 Ultrafina SE

Product Identification Numbers

UU-0108-8136-3

7100224683

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: 3M Ireland Limited, The Iveagh Building, The Park, Carrickmines, Dublin 18.
Telephone: +353 1 280 3555
E Mail: tox.uk@mmm.com
Website: www.3M.com

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

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.

The aspiration hazard classification is not required due to the product's viscosity.

CLASSIFICATION:

This material is not classified as hazardous according to Regulation (EC) No. 1272/2008, as amended, on classification, labelling, and packaging of substances and mixtures.

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

Not applicable

SUPPLEMENTAL INFORMATION:**Supplemental Hazard Statements:**

EUH210 Safety data sheet available on request.

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

Nota L applied.

2.3. Other hazards

Contains a substance that meets the criteria for PBT according to Regulation (EC) No 1907/2006, Annex XIII Contains a substance that meets the criteria for vPvB according to Regulation (EC) No 1907/2006, Annex XIII

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]
Non-Hazardous Ingredients	None	40 - 70	Substance not classified as hazardous
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	(EC-No.) 926-141-6 (REACH-No.) 01-2119456620-43	7 - 15	Asp. Tox. 1, H304 EUH066
Dodecamethylcyclohexasiloxane	(CAS-No.) 540-97-6 (EC-No.) 208-762-8	7 - 15	Substance not classified as hazardous
Aluminium oxide	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	< 7	Substance with a national occupational exposure limit
Distillates (petroleum), solvent-dewaxed heavy paraffinic	(CAS-No.) 64742-65-0 (EC-No.) 265-169-7	< 5	Nota L
Glycerol	(CAS-No.) 56-81-5 (EC-No.) 200-289-5	< 1.5	Substance with a national occupational exposure limit
Undecan-1-ol, ethoxylated	(CAS-No.) 34398-01-1 (EC-No.) 500-084-3	< 0.3	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400,M=1 Aquatic Chronic 2, H411
Decamethylcyclopentasiloxane	(CAS-No.) 541-02-6 (EC-No.) 208-764-9	< 0.3	Aquatic Chronic 4, H413
1,2-benzisothiazol-3(2H)-one	(CAS-No.) 2634-33-5	< 0.05	Acute Tox. 4, H302

	(EC-No.) 220-120-9		Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=1
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Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.

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
1,2-benzisothiazol-3(2H)-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9	(C >= 0.05%) Skin Sens. 1, H317
Undecan-1-ol, ethoxylated	(CAS-No.) 34398-01-1 (EC-No.) 500-084-3	(C >= 10%) Eye Dam. 1, H318 (5% <= C < 10%) Eye Irrit. 2, H319

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

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. Extinguishing media

In case of fire: Use a carbon dioxide or dry chemical extinguisher to extinguish.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products

Substance

Carbon monoxide
Carbon dioxide.

Condition

During combustion.
During combustion.

5.3. Advice 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 vapours, 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. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water.

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with detergent and water. 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. Avoid breathing dust/fume/gas/mist/vapours/spray. 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.)

7.2. Conditions for safe storage including any incompatibilities

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
Aluminium oxide	1344-28-1	Ireland OELs	TWA(Total inhalable dust)(8 hours):10 mg/m3;TWA(as respirable dust)(8 hours):4 mg/m3	

DUST, INERT OR NUISANCE 56-81-5 Ireland OELs TWA(Total inhalable dust)(8 hours):10 mg/m³;TWA(as respirable dust)(8 hours):4 mg/m³

Ireland OELs : Ireland. OELs
 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.

Recommended monitoring procedures:Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

8.2. Exposure controls

In addition, refer to the annex for more information.

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. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining.

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.

Applicable Norms/Standards

Use eye protection conforming to EN 166

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
Polymer laminate	No data available	No data available

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 air-purifying respirator suitable for organic vapours and particulates

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: filter types A & P

8.2.3. Environmental exposure controls

Refer to Annex

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	Liquid.
Specific Physical Form:	Thixotropic liquid.
Colour	Light Blue
Odor	Solvent
Odour threshold	<i>No data available.</i>
Melting point/freezing point	<i>Not applicable.</i>
Boiling point/boiling range	<i>No data available.</i>
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Flash point	$\geq 110\text{ }^{\circ}\text{C}$ [Test Method:Closed Cup]
Autoignition temperature	<i>Not applicable.</i>
Decomposition temperature	<i>No data available.</i>
pH	7.5 - 8.5 Units not available or not applicable. [Details:@ 25° C]
Kinematic Viscosity	10,427 - 13,555 mm ² /sec
Water solubility	Appreciable
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Vapour pressure	<i>No data available.</i>
Density	0.959 - 0.984 g/cm ³ [@ 25 °C]
Relative density	0.911 - 1.007 [Ref Std:WATER=1]
Relative Vapour Density	<i>No data available.</i>

9.2. Other information**9.2.2 Other safety characteristics**

EU Volatile Organic Compounds	<i>No data available.</i>
Evaporation rate	<i>No data available.</i>
Percent volatile	57.2 %

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

Heat.

High shear and high temperature conditions
Sparks and/or flames.
Temperatures above the boiling point.

10.5 Incompatible materials

Alkali and alkaline earth metals.
Strong acids.
Strong oxidising agents.

10.6 Hazardous decomposition products

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

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU 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 internal hazard assessments.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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. Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain.

Skin contact

Mild Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness.

Eye contact

Dust created by cutting, grinding, sanding, or machining may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion

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

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	Inhalation-Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Inhalation-Vapour	Professional judgeme	LC50 estimated to be 20 - 50 mg/l

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		nt	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Dodecamethylcyclohexasiloxane	Dermal	Rat	LD50 > 2,000 mg/kg
Dodecamethylcyclohexasiloxane	Ingestion	Rat	LD50 > 50,000 mg/kg
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
Aluminium oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminium oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Dermal	Rabbit	LD50 > 5,000 mg/kg
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Ingestion	Rat	LD50 > 5,000 mg/kg
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Inhalation-Dust/Mist (4 hours)	similar compounds	LC50 > 4 mg/l
Glycerol	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerol	Ingestion	Rat	LD50 > 5,000 mg/kg
Decamethylcyclopentasiloxane	Dermal	Rabbit	LD50 > 15,000 mg/kg
Decamethylcyclopentasiloxane	Inhalation-Dust/Mist (4 hours)	Rat	LC50 8.7 mg/l
Decamethylcyclopentasiloxane	Ingestion	Rat	LD50 > 24,134 mg/kg
Undecan-1-ol, ethoxylated	Dermal	Rabbit	LD50 > 2,000 mg/kg
Undecan-1-ol, ethoxylated	Ingestion	Rat	LD50 > 700 mg/kg
1,2-benzisothiazol-3(2H)-one	Dermal	Rat	LD50 > 2,000 mg/kg
1,2-benzisothiazol-3(2H)-one	Ingestion	Rat	LD50 454 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Dodecamethylcyclohexasiloxane	Rabbit	No significant irritation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Rabbit	Minimal irritation
Aluminium oxide	Rabbit	No significant irritation
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Rabbit	No significant irritation
Glycerol	Rabbit	No significant irritation
Decamethylcyclopentasiloxane	Rabbit	No significant irritation
Undecan-1-ol, ethoxylated	similar health hazards	Irritant
1,2-benzisothiazol-3(2H)-one	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Dodecamethylcyclohexasiloxane	Rabbit	No significant irritation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Rabbit	Mild irritant
Aluminium oxide	Rabbit	No significant irritation
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Rabbit	No significant irritation
Glycerol	Rabbit	No significant irritation
Decamethylcyclopentasiloxane	Rabbit	No significant irritation
Undecan-1-ol, ethoxylated	Professional judgement	Corrosive
1,2-benzisothiazol-3(2H)-one	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Guinea pig	Not classified
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Guinea pig	Not classified
Glycerol	Guinea pig	Not classified
Decamethylcyclopentasiloxane	Mouse	Not classified
1,2-benzisothiazol-3(2H)-one	Guinea pig	Sensitising

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
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	In Vitro	Not mutagenic
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	In vivo	Not mutagenic
Aluminium oxide	In Vitro	Not mutagenic
Distillates (petroleum), solvent-dewaxed heavy paraffinic	In Vitro	Not mutagenic
Decamethylcyclopentasiloxane	In Vitro	Not mutagenic
Decamethylcyclopentasiloxane	In vivo	Not mutagenic
1,2-benzisothiazol-3(2H)-one	In vivo	Not mutagenic
1,2-benzisothiazol-3(2H)-one	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not available	Not carcinogenic
Aluminium oxide	Inhalation	Rat	Not carcinogenic
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Dermal	Mouse	Not carcinogenic
Glycerol	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
Decamethylcyclopentasiloxane	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Dodecamethylcyclohexasiloxane	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	pre mating & during gestation
Dodecamethylcyclohexasiloxane	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Dodecamethylcyclohexasiloxane	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	pre mating & during gestation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	1 generation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for development	Rat	NOAEL Not available	1 generation
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Dermal	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	during gestation
Glycerol	Ingestion	Not classified for female reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerol	Ingestion	Not classified for male reproduction	Rat	NOAEL	2 generation

					2,000 mg/kg/day	
Glycerol	Ingestion	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	2 generation	
Decamethylcyclopentasiloxane	Inhalation	Not classified for female reproduction	Rat	NOAEL 2.43 mg/l	2 generation	
Decamethylcyclopentasiloxane	Inhalation	Not classified for male reproduction	Rat	NOAEL 2.43 mg/l	2 generation	
Decamethylcyclopentasiloxane	Inhalation	Not classified for development	Rat	NOAEL 2.43 mg/l	2 generation	
1,2-benzisothiazol-3(2H)-one	Ingestion	Not classified for female reproduction	Rat	NOAEL 112 mg/kg/day	2 generation	
1,2-benzisothiazol-3(2H)-one	Ingestion	Not classified for male reproduction	Rat	NOAEL 112 mg/kg/day	2 generation	
1,2-benzisothiazol-3(2H)-one	Ingestion	Not classified for development	Rat	NOAEL 112 mg/kg/day	2 generation	

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Undecan-1-ol, ethoxylated	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
1,2-benzisothiazol-3(2H)-one	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
Dodecamethylcyclohexasiloxane	Ingestion	endocrine system liver respiratory system nervous system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
Aluminium oxide	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminium oxide	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Dermal	skin liver hematopoietic system kidney and/or bladder	Not classified	Rat	NOAEL 2,000 mg/kg/day	13 weeks
Glycerol	Inhalation	respiratory system heart liver kidney and/or bladder	Not classified	Rat	NOAEL 3.91 mg/l	14 days
Glycerol	Ingestion	endocrine system hematopoietic system liver kidney and/or bladder	Not classified	Rat	NOAEL 10,000 mg/kg/day	2 years
Decamethylcyclopentasiloxane	Dermal	hematopoietic system eyes	Not classified	Rat	NOAEL 1,600 mg/kg/day	28 days
Decamethylcyclopentasiloxane	Inhalation	hematopoietic system respiratory system liver eyes kidney and/or bladder	Not classified	Rat	NOAEL 2.42 mg/l	2 years
Decamethylcyclopentasiloxane	Ingestion	liver immune system respiratory system heart hematopoietic	Not classified	Rat	NOAEL 1,000 mg/kg/day	90 days

		system kidney and/or bladder				
1,2-benzisothiazol-3(2H)-one	Ingestion	liver hematopoietic system eyes kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 322 mg/kg/day	90 days
1,2-benzisothiazol-3(2H)-one	Ingestion	heart endocrine system nervous system	Not classified	Rat	NOAEL 150 mg/kg/day	28 days

Aspiration Hazard

Name	Value
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Aspiration hazard
Distillates (petroleum), solvent-dewaxed heavy paraffinic	Not an aspiration hazard

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

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 EU 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
Dodecamethylcyclohexasiloxane	540-97-6	Activated sludge	Experimental	3 hours	EC50	>100 mg/l
Dodecamethylcyclohexasiloxane	540-97-6	Green algae	Experimental	72 hours	EC50	>100 mg/l
Dodecamethylcyclohexasiloxane	540-97-6	Fathead minnow	Experimental	49 days	NOEC	100 mg/l
Dodecamethylcyclohexasiloxane	540-97-6	Green algae	Experimental	72 hours	NOEC	100 mg/l
Dodecamethylcyclohexasiloxane	540-97-6	Water flea	Experimental	21 days	NOEC	100 mg/l
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Green algae	Experimental	72 hours	EL50	>1,000 mg/l
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Rainbow trout	Experimental	96 hours	LL50	>1,000 mg/l
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Water flea	Experimental	48 hours	EL50	>1,000 mg/l
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Green algae	Experimental	72 hours	NOEL	1,000 mg/l

Aluminium oxide	1344-28-1	Fish	Experimental	96 hours	LC50	>100 mg/l
Aluminium oxide	1344-28-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
Aluminium oxide	1344-28-1	Water flea	Experimental	48 hours	LC50	>100 mg/l
Aluminium oxide	1344-28-1	Green algae	Experimental	72 hours	NOEC	>100 mg/l
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	Green algae	Analogous Compound	96 hours	EC50	>100 mg/l
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	Water flea	Analogous Compound	48 hours	EC50	>100 mg/l
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	Rainbow trout	Experimental	96 hours	LC50	>100 mg/l
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	Water flea	Experimental	21 days	NOEC	100 mg/l
Glycerol	56-81-5	Bacteria	Experimental	16 hours	NOEC	10,000 mg/l
Glycerol	56-81-5	Rainbow trout	Experimental	96 hours	LC50	54,000 mg/l
Glycerol	56-81-5	Water flea	Experimental	48 hours	LC50	1,955 mg/l
Decamethylcyclopentasiloxane	541-02-6	Activated sludge	Experimental	3 hours	EC50	>2,000 mg/l
Decamethylcyclopentasiloxane	541-02-6	Green algae	Experimental	96 hours	ErC50	>100 mg/l
Decamethylcyclopentasiloxane	541-02-6	Rainbow trout	Experimental	96 hours	LC50	>100 mg/l
Decamethylcyclopentasiloxane	541-02-6	Water flea	Experimental	48 hours	EC50	>100 mg/l
Decamethylcyclopentasiloxane	541-02-6	Green algae	Experimental	96 hours	NOEC	100 mg/l
Decamethylcyclopentasiloxane	541-02-6	Rainbow trout	Experimental	90 days	NOEC	100 mg/l
Decamethylcyclopentasiloxane	541-02-6	Water flea	Experimental	21 days	NOEC	100 mg/l
Undecan-1-ol, ethoxylated	34398-01-1	Green algae	Analogous Compound	72 hours	ErC50	0.43 mg/l
Undecan-1-ol, ethoxylated	34398-01-1	Green algae	Analogous Compound	72 hours	NOEC	0.09 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Green algae	Experimental	72 hours	ErC50	0.11 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Rainbow trout	Experimental	96 hours	LC50	1.6 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Sheepshead Minnow	Experimental	96 hours	LC50	16.7 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Water flea	Experimental	48 hours	EC50	2.9 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Green algae	Experimental	72 hours	NOEC	0.0403 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Activated sludge	Experimental	3 hours	EC50	12.8 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Bobwhite quail	Experimental	14 days	LD50	617 mg per kg of bodyweight
1,2-benzisothiazol-3(2H)-one	2634-33-5	Cabbage	Experimental	14 days	EC50	200 mg/kg (Dry Weight)
1,2-benzisothiazol-3(2H)-one	2634-33-5	Redworm	Experimental	14 days	LC50	>410.6 mg/kg (Dry Weight)
1,2-benzisothiazol-3(2H)-one	2634-33-5	Soil microbes	Experimental	28 days	EC50	>811.5 mg/kg (Dry Weight)

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Dodecamethylcyclohexasiloxane	540-97-6	Experimental Biodegradation	28 days	CO2 evolution	4.47 %CO2 evolution/THC O2 evolution	OECD 310 CO2 Headspace
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Experimental Biodegradation	28 days	BOD	69 %BOD/ThOD	OECD 301F - Manometric respirometry
Aluminium oxide	1344-28-1	Data not available or insufficient	N/A	N/A	N/A	N/A
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	Experimental Biodegradation	28 days	CO2 evolution	23 %CO2 evolution/THC O2 evolution	similar to OECD 301B
Glycerol	56-81-5	Experimental Biodegradation	14 days	BOD	63 %BOD/ThOD	OECD 301C - MITI test (I)
Decamethylcyclopentasiloxane	541-02-6	Experimental Biodegradation	28 days	CO2 evolution	0.14 %CO2 evolution/THC O2 evolution	OECD 310 CO2 Headspace
Decamethylcyclopentasiloxane	541-02-6	Experimental Photolysis		Photolytic half-life (in air)	20.4 days (t 1/2)	
Decamethylcyclopentasiloxane	541-02-6	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	66 days (t 1/2)	
Undecan-1-ol, ethoxylated	34398-01-1	Modeled Biodegradation	28 days	CO2 evolution	95 %CO2 evolution/THC O2 evolution	Catalogic™
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Biodegradation	28 days	BOD	0 %BOD/ThOD	OECD 301C - MITI test (I)
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Aquatic Inherent Biodegrad.	34 days	Dissolv. Organic Carbon Deplet	17 %removal of DOC	OECD 302A - Modified SCAS Test
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Biodegradation	21 days	Dissolv. Organic Carbon Deplet	80 %removal of DOC	OECD 303A - Simulated Aerobic
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Biodegradation		Half-life (t 1/2)	4 hours (t 1/2)	
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Hydrolysis		Hydrolytic half-life	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Dodecamethylcyclohexasiloxane	540-97-6	Experimental BCF - Fish	49 days	Bioaccumulation factor	1160	OECD305-Bioconcentration
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Aluminium oxide	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerol	56-81-5	Experimental Bioconcentration		Log Kow	-1.76	
Decamethylcyclopentasiloxane	541-02-6	Experimental BCF - Fish	35 days	Bioaccumulation factor	7060	OECD305-Bioconcentration
Decamethylcyclopentasiloxane	541-02-6	Experimental Bioconcentration		Log Kow	8.03	
Undecan-1-ol, ethoxylated	34398-01-1	Modeled Bioconcentration		Bioaccumulation factor	50	Catalogic™
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental BCF - Fish	56 days	Bioaccumulation factor	6.62	similar to OECD 305
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Bioconcentration		Log Kow	1.45	OECD 107 log Kow shke flsk mtd

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
Glycerol	56-81-5	Estimated Mobility in Soil	Koc	<1 l/kg	Episuite™
Decamethylcyclopentasiloxane	541-02-6	Experimental Mobility in Soil	Koc	148,000 l/kg	OECD 106 Adsp-Desb Batch Equil
Undecan-1-ol, ethoxylated	34398-01-1	Estimated Mobility in Soil	Koc	2,472 l/kg	
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Mobility in Soil	Koc	9.33 l/kg	OECD 121 Estim. of Koc by HPLC

12.5. Results of the PBT and vPvB assessment

Ingredient	CAS Nbr	PBT/vPvB status
Dodecamethylcyclohexasiloxane	540-97-6	Meets REACH PBT criteria
Decamethylcyclopentasiloxane	541-02-6	Meets REACH PBT criteria
Dodecamethylcyclohexasiloxane	540-97-6	Meets REACH PBT criteria
Decamethylcyclopentasiloxane	541-02-6	Meets REACH PBT criteria

12.6. Endocrine disrupting properties

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

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

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

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

SECTION 14: Transportation information

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	No data available.	No data available.	No data available.

14.2 UN proper shipping name	No data available.	No data available.	No data available.
14.3 Transport hazard class(es)	No data available.	No data available.	No data available.
14.4 Packing group	No data available.	No data available.	No data available.
14.5 Environmental hazards	No data available.	No data available.	No data available.
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 Marine Transport in bulk according to IMO instruments	No data available.	No data available.	No data available.
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	No data available.	No data available.	No data available.
IMDG Segregation Code	No data available.	No data available.	No data available.

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 through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

<u>Ingredient</u>	<u>CAS Nbr</u>
Decamethylcyclopentasiloxane	541-02-6

Restriction status: listed in REACH Annex XVII

Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 for Conditions of Restriction

Authorization status under REACH:

The following substance/s contained in this product might be or is/are subject to authorization in accordance with REACH:

<u>Ingredient</u>	<u>CAS Nbr</u>
Decamethylcyclopentasiloxane	541-02-6
Dodecamethylcyclohexasiloxane	540-97-6

Authorization status: listed in the Candidate List of Substances of Very High Concern for Authorization

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 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.

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Seveso hazard categories, Annex 1, Part 1

None

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
1,2-benzisothiazol-3(2H)-one	2634-33-5	100	200

Regulation (EU) No 649/2012

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information

List of relevant H statements

EUH066	Repeated exposure may cause skin dryness or cracking.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Revision information:

Label: CLP Percent Unknown information was deleted.

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

Section 03: SCL table information was modified.

Section 6: Accidental release environmental information information was modified.

Section 6: Accidental release personal information information was modified.

Section 09: Kinematic Viscosity information information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Aspiration Hazard Table information was modified.

Section 11: Carcinogenicity Table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.
 Section 11: Reproductive Toxicity Table information was modified.
 Section 11: Serious Eye Damage/Irritation Table information was modified.
 Section 11: Skin Corrosion/Irritation Table information was modified.
 Section 11: Skin Sensitization Table information was modified.
 Section 11: Target Organs - Repeated Table information was modified.
 Section 11: Target Organs - Single Table information was modified.
 Section 12: Component ecotoxicity information information was modified.
 Section 12: Mobility in soil information information was modified.
 Section 12: Persistence and Degradability information information was modified.
 Section 12: Bioaccumulative potential information information was modified.
 Section 13: Standard Phrase Category Waste GHS information was modified.
 Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.

Annex

1. Title	
Substance identification	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics; EC No. 926-141-6;
Exposure Scenario Name	Professional Use of Coatings
Lifecycle Stage	Widespread use by professional workers
Contributing activities	PROC 10 -Roller application or brushing ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
Processes, tasks and activities covered	Application of product.
2. Operational conditions and risk management measures	
Operating Conditions	Physical state: Liquid. General operating conditions: Duration of exposure per day at workplace [for one worker]: 8 hours/day; Emission days per year: 300 days per year; Frequency of exposure at workplace [for one worker]: Daily; Indoor use; Outdoor use;
Risk management measures	Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: None needed;
Waste management measures	Avoid release to the environment. Refer to special instructions / safety data sheet.;
3. Prediction of exposure	
Prediction of exposure	Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted.

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.

3M Ireland MSDSs are available at www.3M.com