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 51052 Fast Cut XL

Product Identification Numbers

GC-8010-5059-9	GC-8010-5060-7	GC-8010-5202-5	UU-0016-6336-6	UU-0109-4375-9
7000085161	7000085160	7000085241	7100057778	7100230013

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

Identified uses

Automotive., Industrial use.

1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
Telephone: +44 (0)1344 858 000
E Mail: tox.uk@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

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:
Skin Sensitization, Category 1 - Skin Sens. 1; H317

For full text of H phrases, see Section 16.

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

SIGNAL WORD
WARNING.

Symbols
GHS07 (Exclamation mark) |

Pictograms

Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9	0.01 - 0.05

HAZARD STATEMENTS:

H317	May cause an allergic skin reaction.

PRECAUTIONARY STATEMENTS
General:

P102	Keep out of reach of children.

Prevention:

P280E	Wear protective gloves.

Response:

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

Disposal:

P501	Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

SUPPLEMENTAL INFORMATION:

Supplemental Hazard Statements:

EUH066	Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

None known.

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	Mixture	40 - 80	Substance not classified as hazardous
Aluminium oxide	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	10 - 30	Substance with a national occupational exposure limit
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	(EC-No.) 926-141-6 (REACH-No.) 01-2119456620-43	10 - 25	Asp. Tox. 1, H304 EUH066
Triethanolamine	(CAS-No.) 102-71-6 (EC-No.) 203-049-8 (REACH-No.) 01-2119486482-31	< 1.5	Substance not classified as hazardous
Glycerol	(CAS-No.) 56-81-5 (EC-No.) 200-289-5	1 - 10	Substance with a national occupational exposure limit
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	(EC-No.) 920-114-2 (REACH-No.) 01-2119459347-30	1 - 10	Asp. Tox. 1, H304 EUH066
White mineral oil (petroleum)	(CAS-No.) 8042-47-5 (EC-No.) 232-455-8	1 - 5	Asp. Tox. 1, H304
Castor oil	(CAS-No.) 8001-79-4 (EC-No.) 232-293-8	< 3	Substance not classified as hazardous
Sorbitan monooleate, ethoxylated	Trade Secret	< 3	Substance not classified as hazardous
1,2-benzisothiazol-3(2H)-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9	0.01 - 0.05	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400,M=10

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

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
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 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

Substance	Condition
Hydrocarbons.	During combustion.
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Irritant vapours or gases.	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.

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 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
For industrial/occupational use only. Not for consumer sale or use. Keep out of reach of children. 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. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

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	UK HSC	TWA(as respirable dust):4 mg/m3;TWA(as inhalable dust):10 mg/m3	
Glycerol	56-81-5	UK HSC	TWA(as mist):10 mg/m3	

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.

Recommended monitoring procedures: Information on recommended monitoring procedures can be obtained from UK HSC

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.

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	>0.30	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

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for organic 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:	White liquid paste
Colour	White
Odor	Slight Hydrocarbon
Odour threshold	*No data available.*
Melting point/freezing point	*No data available.*
Boiling point/boiling range	*No data available.*
Flammability (solid, gas)	Not applicable.

Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Flash point	>=120 ºC [*Test Method:*Closed Cup]
Autoignition temperature	*No data available.*
Decomposition temperature	*No data available.*
pH	8 - 9
Kinematic Viscosity	30,973.4513274336 mm²/sec
Water solubility	Slight (less than 10%)
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Vapour pressure	*No data available.*
Density	1.05 - 1.21 g/ml
Relative density	1.05 - 1.21 [*Ref Std:*WATER=1]
Relative Vapor Density	*No data available.*

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	20 %
Evaporation rate	*No data available.*
Percent volatile	16 % [*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
High shear and high temperature conditions

10.5 Incompatible materials
Alkali and alkaline earth metals.
Strong acids.
Strong oxidising agents.

10.6 Hazardous decomposition products

Substance	**Condition**
None known.	

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not 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
Contact with the skin during product use is not expected to result in significant irritation. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact
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	Dermal		No data available; calculated ATE >5,000 mg/kg
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
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
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Inhalation-Vapour	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	Dermal	Rabbit	LD50 > 2,000 mg/kg
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.3 mg/l
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
Glycerol	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerol	Ingestion	Rat	LD50 > 5,000 mg/kg
White mineral oil (petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
White mineral oil (petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
Sorbitan monooleate, ethoxylated	Dermal	Not available	LD50 > 5,000 mg/kg
Sorbitan monooleate, ethoxylated	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.1 mg/l

Sorbitan monooleate, ethoxylated	Ingestion	Rat	LD50 20,000 mg/kg
Castor oil	Dermal		LD50 estimated to be > 5,000
Castor oil	Ingestion		LD50 estimated to be > 5,000
Triethanolamine	Dermal	Rabbit	LD50 > 2,000 mg/kg
Triethanolamine	Ingestion	Rat	LD50 9,000 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
Aluminium oxide	Rabbit	No significant irritation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Rabbit	Minimal irritation
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	Rabbit	No significant irritation
Glycerol	Rabbit	No significant irritation
White mineral oil (petroleum)	Rabbit	No significant irritation
Sorbitan monooleate, ethoxylated	Rabbit	No significant irritation
Castor oil	Human	Minimal irritation
Triethanolamine	Rabbit	Minimal irritation
1,2-benzisothiazol-3(2H)-one	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Aluminium oxide	Rabbit	No significant irritation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Rabbit	Mild irritant
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	Rabbit	Mild irritant
Glycerol	Rabbit	No significant irritation
White mineral oil (petroleum)	Rabbit	Mild irritant
Sorbitan monooleate, ethoxylated	Rabbit	No significant irritation
Castor oil	Rabbit	Mild irritant
Triethanolamine	Rabbit	Mild irritant
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
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	Guinea pig	Not classified
Glycerol	Guinea pig	Not classified
White mineral oil (petroleum)	Guinea pig	Not classified
Sorbitan monooleate, ethoxylated	Guinea pig	Not classified
Castor oil	Human	Not classified
Triethanolamine	Human	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
Aluminium oxide	In Vitro	Not mutagenic

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
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	In Vitro	Not mutagenic
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	In vivo	Not mutagenic
White mineral oil (petroleum)	In Vitro	Not mutagenic
Sorbitan monooleate, ethoxylated	In Vitro	Not mutagenic
Castor oil	In Vitro	Not mutagenic
Castor oil	In vivo	Not mutagenic
Triethanolamine	In Vitro	Not mutagenic
Triethanolamine	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
Aluminium oxide	Inhalation	Rat	Not carcinogenic
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not available	Not carcinogenic
Glycerol	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
White mineral oil (petroleum)	Dermal	Mouse	Not carcinogenic
White mineral oil (petroleum)	Inhalation	Multiple animal species	Not carcinogenic
Sorbitan monooleate, ethoxylated	Ingestion	Rat	Some positive data exist, but the data are not sufficient for classification
Triethanolamine	Dermal	Multiple animal species	Not carcinogenic
Triethanolamine	Ingestion	Mouse	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
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
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	gestation into lactation
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	28 days
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for development	Rat	NOAEL Not available	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 2,000 mg/kg/day	2 generation
Glycerol	Ingestion	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	2 generation
White mineral oil (petroleum)	Ingestion	Not classified for female reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White mineral oil (petroleum)	Ingestion	Not classified for male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks

White mineral oil (petroleum)	Ingestion	Not classified for development	Rat	NOAEL 4,350 mg/kg/day	during gestation
Sorbitan monooleate, ethoxylated	Ingestion	Not classified for female reproduction	Rat	NOAEL 6,666 mg/kg/day	3 generation
Sorbitan monooleate, ethoxylated	Ingestion	Not classified for male reproduction	Rat	NOAEL 6,666 mg/kg/day	3 generation
Sorbitan monooleate, ethoxylated	Ingestion	Not classified for development	Rat	NOAEL 5,000 mg/kg/day	during organogenesis
Triethanolamine	Ingestion	Not classified for development	Mouse	NOAEL 1,125 mg/kg/day	during organogenesis
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
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
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
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
White mineral oil (petroleum)	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 1,381 mg/kg/day	90 days
White mineral oil (petroleum)	Ingestion	liver | immune system	Not classified	Rat	NOAEL 1,336 mg/kg/day	90 days
Sorbitan monooleate, ethoxylated	Ingestion	heart | endocrine system | gastrointestinal tract | bone, teeth, nails, and/or hair | hematopoietic system | liver | immune system | nervous system | kidney and/or bladder | respiratory system	Not classified	Rat	NOAEL 4,132 mg/kg/day	90 days
Castor oil	Ingestion	heart | hematopoietic	Not classified	Rat	NOAEL 4,800	13 weeks

		system | liver			mg/kg/day	
Castor oil	Ingestion	kidney and/or bladder	Not classified	Mouse	NOAEL 13,000 mg/kg/day	13 weeks
Triethanolamine	Dermal	kidney and/or bladder	Not classified	Multiple animal species	NOAEL 2,000 mg/kg/day	2 years
Triethanolamine	Dermal	liver	Not classified	Mouse	NOAEL 4,000 mg/kg/day	13 weeks
Triethanolamine	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 1,000 mg/kg/day	2 years
Triethanolamine	Ingestion	liver	Not classified	Guinea pig	NOAEL 1,600 mg/kg/day	24 weeks
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
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	Aspiration hazard
White mineral oil (petroleum)	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
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
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
Triethanolamine	102-71-6	Activated sludge	Experimental	3 hours	IC50	>1,000 mg/l
Triethanolamine	102-71-6	Fathead minnow	Experimental	96 hours	LC50	11,800 mg/l
Triethanolamine	102-71-6	Green algae	Experimental	72 hours	EC50	512 mg/l
Triethanolamine	102-71-6	Water flea	Experimental	48 hours	EC50	609.98 mg/l
Triethanolamine	102-71-6	Green Algae	Experimental	72 hours	EC10	26 mg/l
Triethanolamine	102-71-6	Water flea	Experimental	21 days	NOEC	16 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
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	920-114-2	Activated sludge	Estimated	3 hours	EC50	>100 mg/l
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	920-114-2	Fish	Estimated	96 hours	LL50	>1,028 mg/l
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	920-114-2	Green Algae	Estimated	72 hours	EL50	>1,000 mg/l
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	920-114-2	Water flea	Estimated	48 hours	EL50	>1,000 mg/l
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	920-114-2	Green Algae	Estimated	72 hours	NOEL	1,000 mg/l
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	920-114-2	Water flea	Estimated	21 days	NOEL	5 mg/l
White mineral oil (petroleum)	8042-47-5	Water flea	Estimated	48 hours	EL50	>100 mg/l
White mineral oil (petroleum)	8042-47-5	Bluegill	Experimental	96 hours	LL50	>100 mg/l
White mineral oil (petroleum)	8042-47-5	Green algae	Estimated	72 hours	NOEL	100 mg/l
White mineral oil (petroleum)	8042-47-5	Water flea	Estimated	21 days	NOEL	>100 mg/l
Castor oil	8001-79-4	Bacteria	Estimated	16 hours	NOEC	10,000 mg/l
Castor oil	8001-79-4	Zebra Fish	Estimated	96 hours	LC50	>100 mg/l
Sorbitan monooleate, ethoxylated	Trade Secret	Copepods	Estimated	48 hours	LL50	>10,000 mg/l
Sorbitan monooleate, ethoxylated	Trade Secret	Green Algae	Estimated	72 hours	EL50	58.84 mg/l
Sorbitan monooleate, ethoxylated	Trade Secret	Zebra Fish	Estimated	96 hours	LC50	>100 mg/l
Sorbitan monooleate, ethoxylated	Trade Secret	Green Algae	Estimated	72 hours	EC10	19.05 mg/l

Sorbitan monooleate, ethoxylated	Trade Secret	Water flea	Estimated	21 days	NOEL	10 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Green algae	Experimental	72 hours	EC50	0.11 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Pacific oyster	Experimental	48 hours	EC50	0.062 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	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	Bobwhite quail	Experimental	14 days	LD50	617 mg per kg of bodyweight

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Aluminium oxide	1344-28-1	Data not availbl-insufficient			N/A	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Experimental Biodegradation	28 days	BOD	69 % BOD/ThBOD	OECD 301F - Manometric respirometry
Triethanolamine	102-71-6	Experimental Biodegradation	19 days	Dissolv. Organic Carbon Deplet	96 % weight	Non-standard method
Glycerol	56-81-5	Experimental Biodegradation	14 days	BOD	63 % BOD/ThBOD	OECD 301C - MITI test (I)
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	920-114-2	Estimated Biodegradation	28 days	BOD	82 % BOD/ThBOD	OECD 301F - Manometric respirometry
White mineral oil (petroleum)	8042-47-5	Experimental Biodegradation	28 days	CO2 evolution	0 % weight	OECD 301B - Modified sturm or CO2
Castor oil	8001-79-4	Estimated Biodegradation	28 days	BOD	64 % weight	OECD 301D - Closed bottle test
Sorbitan monooleate, ethoxylated	Trade Secret	Experimental Biodegradation	28 days	CO2 evolution	61 % weight	Non-standard method
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Biodegradation	28 days	BOD	0 % BOD/ThBOD	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
Aluminium oxide	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
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
Triethanolamine	102-71-6	Experimental BCF-Carp	42 days	Bioaccumulation factor	<3.9	Non-standard method
Glycerol	56-81-5	Experimental Bioconcentration		Log Kow	-1.76	Non-standard method
Hydrocarbons, C14-C19, isoalkanes, cyclics, <2% aromatics	920-114-2	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
White mineral oil (petroleum)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Castor oil	8001-79-4	Estimated Bioconcentration		Bioaccumulation factor	7.4	Estimated: Bioconcentration factor
Sorbitan monooleate, ethoxylated	Trade Secret	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental BCF - Bluegill	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™
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Mobility in Soil	Koc	ERROR: Length cannot be greater than the length of the string.	OECD 121 Estim. of Koc by HPLC

12.5. Results of the PBT and vPvB assessment

This material does not contain any substances that are assessed to be a PBT or vPvB

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)

080112	Waste paint and varnish other than those mentioned in 08 01 11
120199	Wastes not otherwise specified

SECTION 14: Transportation information

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN 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 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	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 Tunnel Code	No data available.	Not applicable.	No data available.
ADR Classification Code	No data available.	No data available.	No data available.
ADR Transport Category	No data available.	No data available.	No data available.
ADR Multiplier	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

Carcinogenicity

Ingredient	CAS Nbr	Classification	Regulation
Triethanolamine	102-71-6	Gr. 3: Not classifiable	International Agency for Research on Cancer

Global inventory status
Contact 3M for more information. The components of this material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory.

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.
H400	Very toxic to aquatic life.

Revision information:
Section 3: Composition/ Information of ingredients table information was modified.
Section 12: Component ecotoxicity information information was modified.
Section 12: Persistence and Degradability information information was modified.
Section 12:Bioccumulative potential information 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.

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