



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006) as amended by Regulation (EU) 2020/878

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

1.1. Product identifier

3M™ Perfect-It™ Random Orbital Compound PN34130E, PN34131E, PN34132E

Product Identification Numbers

UU-0115-2747-8	UU-0115-2823-7	UU-0115-2828-6
7100265273	7100264084	7100264095

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

Identified uses

Abrasive Product

1.3. Details of the supplier of the safety data sheet

Address:	3M Ireland Limited, 70 SIR JOHN ROGERSON'S QUAY, D02R296 DUBLIN 2
Telephone:	+353 1 280 3555
E Mail:	ner-productstewardship@mmm.com
Website:	www.3M.com

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

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.

Aspiration hazard classification does not apply due to the kinematic viscosity of the product.

CLASSIFICATION:

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

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

WARNING.

Symbols

GHS07 (Exclamation mark) |

Pictograms



Ingredients:

Ingredient	Identifier(s)	EC No.	% by Wt
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride		701-048-1	<= 0.5
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	911-418-6	< 0.0015
maleic anhydride	108-31-6	203-571-6	<= 0.001

HAZARD STATEMENTS:

H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P280E Wear protective gloves.

Response:

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

SUPPLEMENTAL INFORMATION:

Supplemental Hazard Statements:

EUH066 Repeated exposure may cause skin dryness or cracking.

Information required per Regulation (EU) No 528/2012 on Biocidal Products:

Contains a biocidal product (preservative): C(M)IT/MIT (3:1).

2.3. Other hazards

None known.

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

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]
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	50 - 60	Substance not classified as hazardous
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	(EC-No.) 923-037-2 (REACH-No.) 01-2119471991-29	15 - 20	Aquatic Chronic 2, H411 Flam. Liq. 3, H226 Asp. Tox. 1, H304 EUH066
Aluminium Oxide (non-fibrous)	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	5 - 15	Substance with a national occupational exposure limit
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	(EC-No.) 926-141-6	1 - 5	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
Glycerol	(CAS-No.) 56-81-5 (EC-No.) 200-289-5	< 3	Substance with a national occupational exposure limit
Triethanolamine	(CAS-No.) 102-71-6 (EC-No.) 203-049-8	< 2	Substance with a national occupational exposure limit
Castor oil	(CAS-No.) 8001-79-4 (EC-No.) 232-293-8	< 2	Substance not classified as hazardous
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	(EC-No.) 701-048-1	<= 0.5	Skin Sens. 1B, H317
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	(CAS-No.) 55965-84-9 (EC-No.) 911-418-6	< 0.0015	EUH071 Acute Tox. 3, H301 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400,M=100 Aquatic Chronic 1, H410,M=100 Nota B Acute Tox. 2, H330 Acute Tox. 2, H310
maleic anhydride	(CAS-No.) 108-31-6	<= 0.001	EUH071

	(EC-No.) 203-571-6		Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372
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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
maleic anhydride	(CAS-No.) 108-31-6 (EC-No.) 203-571-6	(C >= 0.001%) Skin Sens. 1A, H317
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	(CAS-No.) 55965-84-9 (EC-No.) 911-418-6	(C >= 0.6%) Skin Corr. 1C, H314 (0.06% <= C < 0.6%) Skin Irrit. 2, H315 (C >= 0.6%) Eye Dam. 1, H318 (0.06% <= C < 0.6%) Eye Irrit. 2, H319 (C >= 0.0015%) Skin Sens. 1A, 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

The most important symptoms and effects based on the CLP classification include:

Allergic skin reaction (redness, swelling, blistering, and itching). Dermal defatting (localized redness, itching, drying and cracking of skin).

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.

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

Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS. 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.

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 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

Avoid breathing of dust created by cutting, sanding, grinding or machining. 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 strong bases. 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	Identifier(s)	Agency	Limit type	Additional comments
Triethanolamine	102-71-6	Ireland OELs	TWA(8 hours):5 mg/m ³	
maleic anhydride	108-31-6	Ireland OELs	TWA(inhalable fraction and vapour)(8 hours):0.01 ppm	Resp/Dermal sensitizer, Respiratory or dermal sens
Aluminium Oxide (non-fibrous)	1344-28-1	Ireland OELs	TWA(Total inhalable dust)(8 hours):10 mg/m ³ ;TWA(as respirable dust)(8 hours):4 mg/m ³	
Dusts non-specific	56-81-5	Ireland OELs	TWA(Total inhalable dust)(8 hours):10 mg/m ³ ;TWA(as respirable dust)(8 hours):4 mg/m ³	
Mineral oil Pure, Highly & Severely Refined Ireland OELs : Ireland. OELs TWA: Time-Weighted-Average STEL: Short Term Exposure Limit CEIL: Ceiling	8042-47-5	Ireland OELs	TWA(inhalable fraction)(8 hours):5 mg/m ³	

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

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

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.

Gloves made from the following material(s) are recommended:

Material	Thickness (mm)	Breakthrough Time
Butyl rubber.	>.3	=>8 hours
Fluoroelastomer	>.3	=>8 hours
Nitrile rubber.	>.3	=>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 (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Emulsion
Colour	White
Odor	No data available.
Odour threshold	No data available.
Melting point/freezing point	No data available.
Boiling point/boiling range	No data available.
Flammability	Not applicable.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Flash point	No data available.
Autoignition temperature	No data available.
Decomposition temperature	No data available.
pH	8.2 - 8.7
Kinematic Viscosity	29,412 - 40,201 mm ² /sec
Water solubility	No data available.
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Vapour pressure	No data available.
Density	0.995 - 1.02 g/cm ³
Relative density	No data available.
Relative Vapour Density	No data available.
Particle Characteristics	Not applicable.

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	No data available.
Evaporation rate	No data available.

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.

10.5 Incompatible materials

Strong acids.

Strong bases.

Strong oxidising agents.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Hydrocarbons.	Not specified.
Carbon monoxide	Not specified.
Carbon dioxide.	Not specified.

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. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

Contact with the eyes during product use is not expected to result in significant irritation. 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
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Dermal	similar compounds	LD50 > 5,000 mg/kg
Aluminium Oxide (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium Oxide (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminium Oxide (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Ingestion	Rat	LD50 > 15,000 mg/kg
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Dermal	similar compounds	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
Glycerol	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerol	Ingestion	Rat	LD50 > 5,000 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
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Ingestion	Rat	LD50 > 5,385 mg/kg
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Dermal	similar health hazards	LD50 estimated to be > 5,000 mg/kg
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Dermal	Rabbit	LD50 87 mg/kg
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.171 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Ingestion	Rat	LD50 40 mg/kg
maleic anhydride	Dermal	Rabbit	LD50 2,620 mg/kg
maleic anhydride	Ingestion	Rat	LD50 1,030 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Rabbit	Mild irritant
Aluminium Oxide (non-fibrous)	Rabbit	No significant irritation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	similar compounds	Mild irritant
White mineral oil (petroleum)	Rabbit	No significant irritation
Glycerol	Rabbit	No significant irritation

Castor oil	Human	Minimal irritation
Triethanolamine	Rabbit	Minimal irritation
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Rabbit	No significant irritation
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Rabbit	Corrosive
maleic anhydride	Human and animal	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Rabbit	No significant irritation
Aluminium Oxide (non-fibrous)	Rabbit	No significant irritation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	similar compounds	No significant irritation
White mineral oil (petroleum)	Rabbit	Mild irritant
Glycerol	Rabbit	No significant irritation
Castor oil	Rabbit	Mild irritant
Triethanolamine	Rabbit	Mild irritant
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Rabbit	No significant irritation
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Rabbit	Corrosive
maleic anhydride	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Guinea pig	Not classified
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	similar compounds	Not classified
White mineral oil (petroleum)	Guinea pig	Not classified
Glycerol	Guinea pig	Not classified
Castor oil	Human	Not classified
Triethanolamine	Human	Not classified
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Mouse	Sensitising
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Human and animal	Sensitising
maleic anhydride	Multiple animal species	Sensitising

Photosensitisation

Name	Species	Value
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Human and animal	Not sensitising

Respiratory Sensitisation

Name	Species	Value
maleic anhydride	Human	Sensitising

Germ Cell Mutagenicity

Name	Route	Value
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	In Vitro	Not mutagenic
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	In vivo	Not mutagenic
Aluminium Oxide (non-fibrous)	In Vitro	Not mutagenic
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	In Vitro	Not mutagenic
White mineral oil (petroleum)	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
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	In Vitro	Not mutagenic
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	In vivo	Not mutagenic
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	In Vitro	Some positive data exist, but the data are not sufficient for classification
maleic anhydride	In vivo	Not mutagenic
maleic anhydride	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Aluminium Oxide (non-fibrous)	Inhalation	Rat	Not carcinogenic
White mineral oil (petroleum)	Dermal	Mouse	Not carcinogenic
White mineral oil (petroleum)	Inhalation	Multiple animal species	Not carcinogenic
Glycerol	Ingestion	Mouse	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
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Dermal	Mouse	Not carcinogenic
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Ingestion	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Inhalation	Not classified for development	Rat	NOAEL 5.2 mg/l	during organogenesis
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
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	2 generation

				mg/kg/day	
Triethanolamine	Ingestion	Not classified for development	Mouse	NOAEL 1,125 mg/kg/day	during organogenesis
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	gestation into lactation
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Ingestion	Not classified for female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Ingestion	Not classified for male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Ingestion	Not classified for development	Rat	NOAEL 15 mg/kg/day	during organogenesis
maleic anhydride	Ingestion	Not classified for female reproduction	Rat	NOAEL 55 mg/kg/day	2 generation
maleic anhydride	Ingestion	Not classified for male reproduction	Rat	NOAEL 55 mg/kg/day	2 generation
maleic anhydride	Ingestion	Not classified for development	Rat	NOAEL 140 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	
maleic anhydride	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 2.6 mg/l	13 weeks
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Inhalation	heart liver endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system eyes respiratory system	Not classified	Rat	NOAEL 10.4 mg/l	13 weeks
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Ingestion	liver kidney and/or bladder heart skin endocrine system	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks

		gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system muscles nervous system eyes respiratory system vascular system				
Aluminium Oxide (non-fibrous)	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Aluminium Oxide (non-fibrous)	Inhalation	pulmonary fibrosis	Not classified	Human	NOAEL Not available	occupational exposure
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Inhalation	liver	Not classified	Rat	NOAEL 6 mg/l	13 weeks
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.5 mg/l	13 weeks
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 6 mg/l	13 weeks
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Ingestion	liver	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Ingestion	kidney and/or bladder	Not classified	Rat	LOAEL 100 mg/kg/day	13 weeks
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Ingestion	hematopoietic system eyes	Not classified	Rat	NOAEL 1,000 mg/kg/day	13 weeks
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
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
Castor oil	Ingestion	heart hematopoietic system liver	Not classified	Rat	NOAEL 4,800 mg/kg/day	13 weeks
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
Condensation products of triethanolamine with addition products of fatty	Ingestion	hematopoietic system heart endocrine system	Not classified	Rat	NOAEL 1,000 mg/kg/day	35 days

acids, C18 (unsaturated) alkyl with maleic anhydride		gastrointestinal tract bone, teeth, nails, and/or hair liver immune system muscles nervous system eyes kidney and/or bladder respiratory system				
maleic anhydride	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.0011 mg/l	6 months
maleic anhydride	Inhalation	endocrine system hematopoietic system nervous system kidney and/or bladder heart liver eyes	Not classified	Rat	NOAEL 0.0098 mg/l	6 months
maleic anhydride	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 55 mg/kg/day	80 days
maleic anhydride	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 250 mg/kg/day	183 days
maleic anhydride	Ingestion	heart nervous system	Not classified	Rat	NOAEL 600 mg/kg/day	183 days
maleic anhydride	Ingestion	gastrointestinal tract	Not classified	Rat	NOAEL 150 mg/kg/day	80 days
maleic anhydride	Ingestion	hematopoietic system	Not classified	Dog	NOAEL 60 mg/kg/day	90 days
maleic anhydride	Ingestion	skin endocrine system immune system eyes respiratory system	Not classified	Rat	NOAEL 150 mg/kg/day	80 days

Aspiration Hazard

Name	Value
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Aspiration hazard
Hydrocarbons, C11-C14, n-alkanes, 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	Identifier(s)	Organism	Type	Exposure	Test endpoint	Test result
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Green algae	Experimental	72 hours	EL50	>1,000 mg/l

3M™ Perfect-It™ Random Orbital Compound PN34130E, PN34131E, PN34132E

Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Rainbow trout	Experimental	96 hours	LL50	>1,000 mg/l
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Water flea	Experimental	48 hours	EL50	>1,000 mg/l
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Green algae	Experimental	72 hours	NOEL	1,000 mg/l
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Water flea	Experimental	21 days	NOEL	1 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	N/A	Experimental	96 hours	LC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Water flea	Experimental	48 hours	LC50	>100 mg/l
Aluminium Oxide (non-fibrous)	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
White mineral oil (petroleum)	8042-47-5	Water flea	Analogous Compound	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	Analogous Compound	72 hours	NOEL	100 mg/l
White mineral oil (petroleum)	8042-47-5	Water flea	Analogous Compound	21 days	NOEL	>100 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
Glycerol	56-81-5	Bacteria	Experimental	16 hours	NOEC	10,000 mg/l
Castor oil	8001-79-4	Zebra Fish	Analogous Compound	96 hours	LC50	>100 mg/l
Castor oil	8001-79-4	Bacteria	Analogous Compound	16 hours	NOEC	10,000 mg/l
Triethanolamine	102-71-6	Diatom	Experimental	72 hours	EC50	204 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	ErC50	512 mg/l
Triethanolamine	102-71-6	Water flea	Experimental	48 hours	EC50	609.98 mg/l
Triethanolamine	102-71-6	Diatom	Experimental	72 hours	EC10	>10 mg/l
Triethanolamine	102-71-6	Green algae	Experimental	72 hours	ErC10	26 mg/l
Triethanolamine	102-71-6	Water flea	Experimental	21 days	NOEC	16 mg/l

Triethanolamine	102-71-6	Activated sludge	Experimental	3 hours	IC50	>1,000 mg/l
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	701-048-1	Green algae	Experimental	72 hours	EL50	105 mg/l
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	701-048-1	Rainbow trout	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	701-048-1	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	701-048-1	Green algae	Experimental	72 hours	EL10	40 mg/l
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	701-048-1	Water flea	Experimental	21 days	No tox obs at lmt of water sol	>100 mg/l
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	701-048-1	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Activated sludge	Experimental	3 hours	NOEC	0.91 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Bacteria	Experimental	16 hours	EC50	5.7 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Copepod	Experimental	48 hours	EC50	0.007 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Diatom	Experimental	72 hours	ErC50	0.0199 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Green algae	Experimental	72 hours	ErC50	0.027 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Rainbow trout	Experimental	96 hours	LC50	0.19 mg/l

Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Sheepshead Minnow	Experimental	96 hours	LC50	0.3 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Water flea	Experimental	48 hours	EC50	0.099 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Diatom	Experimental	48 hours	NOEC	0.00049 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Fathead minnow	Experimental	36 days	NOEL	0.02 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Green algae	Experimental	72 hours	NOEC	0.004 mg/l
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Water flea	Experimental	21 days	NOEC	0.004 mg/l
maleic anhydride	108-31-6	Bacteria	Experimental	18 hours	EC10	44.6 mg/l
maleic anhydride	108-31-6	Rainbow trout	Experimental	96 hours	LC50	75 mg/l
maleic anhydride	108-31-6	Green algae	Hydrolysis Product	72 hours	ErC50	74.4 mg/l
maleic anhydride	108-31-6	Water flea	Hydrolysis Product	48 hours	EC50	93.8 mg/l
maleic anhydride	108-31-6	Water flea	Experimental	21 days	NOEC	10 mg/l
maleic anhydride	108-31-6	Green algae	Hydrolysis Product	72 hours	ErC10	11.8 mg/l

12.2. Persistence and degradability

Material	Identifier(s)	Test type	Duration	Study Type	Test result	Protocol
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Experimental Biodegradation	28 days	BOD	31.3 %BOD/ThOD	OECD 301F - Manometric respirometry
Aluminium Oxide (non-fibrous)	1344-28-1	Data not available - insufficient	N/A	N/A	N/A	N/A
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Experimental Biodegradation	28 days	BOD	69 %BOD/ThOD	OECD 301F - Manometric respirometry
White mineral oil (petroleum)	8042-47-5	Experimental Biodegradation	28 days	CO2 evolution	0 %CO2 evolution/THCO2 evolution	OECD 301B - Modified Sturm or CO2
Glycerol	56-81-5	Experimental Biodegradation	14 days	BOD	63 %BOD/ThOD	OECD 301C - MITI test (I)
Castor oil	8001-79-4	Analogous Compound Biodegradation	28 days	BOD	64 %BOD/ThOD	OECD 301D - Closed bottle test
Triethanolamine	102-71-6	Experimental Aquatic Inherent Biodegrad.	14 days	Dissolv. Organic Carbon Deplet	89 %removal of DOC	OECD 302B Zahn-Wellens/EVPA
Triethanolamine	102-71-6	Experimental Biodegradation	19 days	Dissolv. Organic Carbon Deplet	96 %removal of DOC	similar to OECD 301E

Triethanolamine	102-71-6	Experimental Biodegradation		Half-life (t 1/2)	342 days (t 1/2)	
Triethanolamine	102-71-6	Experimental Biodegradation		Half-life (t 1/2)	14.4 hours (t 1/2)	
Triethanolamine	102-71-6	Experimental Biodegradation		Half-life (t 1/2)	≤1.8 days (t 1/2)	
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	701-048-1	Experimental Biodegradation	28 days	BOD	23 %BOD/ThOD	OECD 301F - Manometric respirometry
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Analogous Compound Biodegradation	29 days	CO2 evolution	62 %CO2 evolution/THC O2 evolution (does not pass 10-day window)	OECD 301B - Modified sturm or CO2
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	> 60 days (t 1/2)	
maleic anhydride	108-31-6	Hydrolysis product Biodegradation	25 days	CO2 evolution	>90 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
maleic anhydride	108-31-6	Experimental Hydrolysis		Hydrolytic half-life	0.37 minutes (t 1/2)	

12.3 : Bioaccumulative potential

Material	Identifier(s)	Test type	Duration	Study Type	Test result	Protocol
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Estimated Bioconcentration		Log Kow	> 4	
Aluminium Oxide (non-fibrous)	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
White mineral oil (petroleum)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerol	56-81-5	Experimental Bioconcentration		Log Kow	-1.75	similar to OECD 107
Castor oil	8001-79-4	Modeled Bioconcentration		Bioaccumulation factor	7	Catalogic™
Triethanolamine	102-71-6	Experimental BCF - Fish	42 days	Bioaccumulation factor	<3.9	similar to OECD 305
Triethanolamine	102-71-6	Experimental Bioconcentration		Log Kow	-1.9	OECD 107 log Kow shke flask mtd
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	701-048-1	Experimental Bioconcentration		Log Kow	< 1	OECD 117 log Kow HPLC method
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Analogous Compound BCF - Fish	28 days	Bioaccumulation factor	54	OECD305-Bioconcentration
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Analogous Compound Bioconcentration		Log Kow	0.4	
maleic anhydride	108-31-6	Experimental Bioconcentration		Log Kow	-2.61	OECD 107 log Kow shke flask mtd

12.4. Mobility in soil

Material	Identifier(s)	Test type	Study Type	Test result	Protocol
Glycerol	56-81-5	Modeled Mobility in Soil	Koc	<1 l/kg	Episuite™
Castor oil	8001-79-4	Modeled Mobility in Soil	Koc	10,000,000,000 l/kg	Episuite™
Triethanolamine	102-71-6	Modeled Mobility in Soil	Koc	1 l/kg	ACD/Labs ChemSketch™
Condensation products of triethanolamine with addition products of fatty acids, C18 (unsaturated) alkyl with maleic anhydride	701-048-1	Experimental Mobility in Soil	Koc	<316 l/kg	OECD 121 Estim. of Koc by HPLC
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1)	55965-84-9	Experimental Mobility in Soil	Koc	10 l/kg	OECD 106 Adsp-Desb Batch Equil

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)

120109* Machining emulsions and solutions free of halogens

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

Carcinogenicity

Ingredient

Triethanolamine

Identifier(s)

102-71-6

Classification

Gr. 3: Not classifiable

Regulation

International Agency
for Research on Cancer

Global inventory status

Contact 3M for more information.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

None

Regulation (EU) No 649/2012

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.

SECTION 16: Other information

List of relevant H statements

EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
H412	Harmful to aquatic life with long lasting effects.

List of Relevant Notas

Nota B	Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
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Revision information:

EU Section 14 - Table Data information was added.

EU Section 14 - Table Headers information was added.

Section 1: Address information was modified.

Section 1: E-mail address information was modified.

CLP: Ingredient table information was modified.

Label: Graphic information was modified.

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

Section 03: SCL table information was modified.

Section 04: First Aid - Symptoms and Effects (CLP) information was modified.

Section 6: Accidental release personal information information was modified.

Section 7: Conditions safe storage information was modified.

Section 8: Occupational exposure limit table information was modified.

Section 08: Personal Protection - Apron Statement information was added.

Section 8: Personal Protection - Skin/body information information was deleted.

Section 8: Skin protection - protective clothing information information was deleted.

Section 9: Flammability (solid, gas) information information was deleted.

Section 09: Flammability information information was added.

Section 09: Kinematic Viscosity information information was modified.

Section 09: Particle Characteristics N/A information was added.

Section 9: Vapour pressure value information was added.

Section 9: Vapour pressure value information was deleted.

Section 11: Acute Toxicity table information was modified.

Section 11: Carcinogenicity Table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Photosensitisation 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 14 Classification Code – Main Heading information was deleted.

Section 14 Classification Code – Regulation Data information was deleted.

Section 14 Control Temperature – Main Heading information was deleted.

Section 14 Control Temperature – Regulation Data information was deleted.

Section 14 Emergency Temperature – Main Heading information was deleted.

Section 14 Emergency Temperature – Regulation Data information was deleted.

Section 14 Hazard Class + Sub Risk – Main Heading information was deleted.

Section 14 Hazard Class + Sub Risk – Regulation Data information was deleted.

Section 14 Other Dangerous Goods – Main Heading information was deleted.

Section 14 Other Dangerous Goods – Regulation Data information was deleted.

Section 14 Packing Group – Main Heading information was deleted.

Section 14 Packing Group – Regulation Data information was deleted.

Section 14 Proper Shipping Name information was deleted.

Section 14 Regulations – Main Headings information was deleted.

Section 14 Segregation – Regulation Data information was deleted.

Section 14 Segregation Code – Main Heading information was deleted.

Section 14 Special Precautions – Main Heading information was deleted.

Section 14 Special Precautions – Regulation Data information was deleted.

Section 14 Transport in bulk – Regulation Data information was deleted.

Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was deleted.

Section 14 UN Number Column data information was deleted.

Section 14 UN Number information was deleted.

Section 15: Seveso Substance Text information was deleted.

Section 16: Two-column table displaying the unique list of Notas for all components of the given material. information was added.

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