Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the New Zealand, Hazardous Substances (Safety Data Sheets) Notice 2017.

SECTION 1: Identification

1.1. Product identifier
3M 51815, 51816, 51818 Fast Cut Plus Extreme

Product Identification Numbers
NS-0700-1276-1

1.2. Recommended use and restrictions on use

Recommended use
Automotive. Fast Cut Plus Extreme

For Industrial or Professional use only

1.3. Supplier's details
Address: 3M New Zealand Ltd, 94 Apollo Drive, Rosedale 0632, Auckland
Telephone: (09) 477 4040
E Mail: innovation@nz.mmm.com
Website: 3m.co.nz

1.4. Emergency telephone number
24 hr Medical Emergency, National Poisons Centre, 0800 764 766 (0800 POISON)

SECTION 2: Hazard identification

Classified as hazardous in accordance with the relevant criteria of the HSNO Act 1996 and the Hazardous Substances (Hazard Classification) Notice 2020.
Refer to Section 14 of this Safety Data Sheet for product Dangerous Goods Classification.

2.1. Classification of the substance or mixture
Specific target organ toxicity – repeated exposure: Category 2
Hazardous to the aquatic environment chronic: Category 3

2.2. Label elements
SIGNAL WORD
Warning

Symbols:
Health Hazard |

Pictograms

HAZARD STATEMENTS:

H373	May cause damage to organs through prolonged or repeated exposure: nervous system.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

General

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.

Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.

Response

P314	Get medical advice/attention if you feel unwell.

Disposal

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

2.3. Other hazards
Aspiration classification does not apply due to the viscosity of the product.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	% by Weight
Non-hazardous ingredient	7732-18-5	25 - 45
Aluminium oxide	1344-28-1	20 - 25
Distillates (petroleum), hydrotreated light	64742-47-8	< 12
White mineral oil (petroleum)	8042-47-5	< 10
Glycerol	56-81-5	< 7
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	< 7
Sorbitan monooleate, ethoxylated	9005-65-6	< 5
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	< 3
Distillates (petroleum), hydrotreated middle	64742-46-7	< 3
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	< 3
Alcohols, C16-18 and C18-unsatd. unsaturated alkyl alcohol and SDA Reporting Number: 11-060-00. Consult SDA Substance Identification Procedure.	68002-94-8	< 2
1,2-Benzisothiazol-3(2H)-one	2634-33-5	< 0.1

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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

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

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

4.2. Most important symptoms and effects, both acute and delayed
The most important symptoms and effects based on the CLP classification include:

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

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

Hazardous Decomposition or By-Products

Substance	Condition
Hydrocarbons.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	During combustion.

5.3. Special protective actions for fire-fighters
Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

5.4. Hazchem code: Not applicable.

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 vapors, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
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 in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

Refer to Section 15 - Controls for more information

7.1. Precautions for safe handling
Avoid breathing of dust created by cutting, sanding, grinding or machining. For industrial/occupational use only. Not for consumer sale or use. Keep out of reach of children. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities
Store away from oxidising agents.

7.3. Certified handler
Not required

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	New Zealand WES	TWA(8 hours):10 mg/m3	
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m3	A4: Not class. as human carcinogin
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	1344-28-1	ACGIH	TWA(inhalable particulates):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	1344-28-1	ACGIH	TWA(respirable particles):3 mg/m3	
Glycerol	56-81-5	New Zealand WES	TWA(as mist)(8 hours):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, inhalable particles	56-81-5	ACGIH	TWA(inhalable particulates):10 mg/m3	
Particles (insoluble or poorly soluble) not otherwise specified, respirable particles	56-81-5	ACGIH	TWA(respirable particles):3 mg/m3	
Paraffin oil	64742-46-7	New Zealand WES	TWA(as mist)(8 hours):5 mg/m3;STEL(as mist)(15 minutes):10 mg/m3	
Jet fuels (non-aerosol), as total hydrocarbon vapour	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN

Stoddard solvent	64742-82-1	ACGIH	TWA:100 ppm	
Stoddard solvent	64742-82-1	New Zealand WES	TWA(8 hours):525 mg/m3(100 ppm)	
Jet fuels (non-aerosol), as total hydrocarbon vapour	64742-94-5	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN
Kerosine (petroleum)	64742-94-5	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m3	A3: Confirmed animal carcin., SKIN
Mineral oils, highly-refined oils	8042-47-5	ACGIH	TWA(inhalable fraction):5 mg/m3	A4: Not class. as human carcinogin
Paraffin oil	8042-47-5	New Zealand WES	TWA(as mist)(8 hours):5 mg/m3;STEL(as mist)(15 minutes):10 mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
New Zealand WES : New Zealand Workplace Exposure Standards.
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
ppm: parts per million
mg/m³: milligrams per cubic metre
CEIL: Ceiling

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

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.

Refer AS/NZS 1336 - Recommended practices for occupational eye protection and for performance specifications AS/NZS 1337, Parts 1 - 6 - Personal eye-protection.

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: 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 vapors and particulates

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

Refer AS/NZS 1715 - Selection, use and maintenance of respiratory protective equipment and AS/NZS 1716 - Respiratory protective devices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Emulsion
Colour	White
Odour	Pine, Oily
Odour threshold	*No data available.*
pH	7.5 9 Units not available or not applicable. [*Details:*@20 C (+/- 1 C)]
Melting point/Freezing point	*Not applicable.*
Boiling point/Initial boiling point/Boiling range	*No data available.*
Flash point	*No data available.*
Evaporation rate	*Not applicable.*
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	*No data available.*
Flammable Limits(UEL)	*No data available.*
Vapour pressure	*No data available.*
Vapor Density and/or Relative Vapor Density	*No data available.*
Density	1.15 g/cm3 [@ 20 ºC]
Relative density	1.15 [*Ref Std:*WATER=1]
Water solubility	*No data available.*
Solubility- non-water	*No data available.*
Partition coefficient: n-octanol/water	*No data available.*
Autoignition temperature	*No data available.*
Decomposition temperature	*No data available.*
Viscosity/Kinematic Viscosity	40,000 - 50,000 mPa-s [*Test Method:*Brookfield] [*Details:*@20 C (+/-1 C)]
Volatile organic compounds (VOC)	20 %
Percent volatile	20 %
VOC less H2O & exempt solvents	20 %

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
Sparks and/or flames.

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

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation
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. May cause additional health effects (see below).

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

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

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

Additional Health Effects:

Prolonged or repeated exposure may cause target organ effects:
Central neuropathy: Signs/symptoms may include irritability, memory impairment, personality changes, sleep disorders, and decreased ability to concentrate.

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-Vapor(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
Distillates (petroleum), hydrotreated light	Inhalation-Vapor	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Distillates (petroleum), hydrotreated light	Dermal	Rabbit	LD50 > 5,000 mg/kg
Distillates (petroleum), hydrotreated light	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
Naphtha (petroleum), hydrodesulfurized heavy	Dermal	Rat	LD50 > 3,400 mg/kg
Naphtha (petroleum), hydrodesulfurized heavy	Inhalation-Vapor (4 hours)	Rat	LC50 > 16.2 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	Ingestion	Rat	LD50 > 15,000 mg/kg
Glycerol	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerol	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
Solvent naphtha (petroleum), heavy aromatic	Inhalation-Vapor	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Solvent naphtha (petroleum), heavy aromatic	Dermal	Rabbit	LD50 > 2,000 mg/kg
Solvent naphtha (petroleum), heavy aromatic	Ingestion	Rat	LD50 > 5,000 mg/kg
Synthetic amorphous silica, fumed, crystalline-free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic amorphous silica, fumed, crystalline-free	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Rat	LD50 > 5,110 mg/kg
Distillates (petroleum), hydrotreated middle	Dermal	Rabbit	LD50 > 2,000 mg/kg
Distillates (petroleum), hydrotreated middle	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 5.3 mg/l
Distillates (petroleum), hydrotreated middle	Ingestion	Rat	LD50 > 5,000 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
Distillates (petroleum), hydrotreated light	Rabbit	Mild irritant
White mineral oil (petroleum)	Rabbit	No significant irritation
Naphtha (petroleum), hydrodesulfurized heavy	Rabbit	Minimal irritation
Glycerol	Rabbit	No significant irritation
Sorbitan monooleate, ethoxylated	Rabbit	No significant irritation
Solvent naphtha (petroleum), heavy aromatic	Rabbit	Minimal irritation
Synthetic amorphous silica, fumed, crystalline-free	Rabbit	No significant irritation
Distillates (petroleum), hydrotreated middle	Rabbit	No significant irritation
1,2-Benzisothiazol-3(2H)-one	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Aluminium oxide	Rabbit	No significant irritation
Distillates (petroleum), hydrotreated light	Rabbit	Mild irritant
White mineral oil (petroleum)	Rabbit	Mild irritant
Naphtha (petroleum), hydrodesulfurized heavy	Rabbit	No significant irritation
Glycerol	Rabbit	No significant irritation

Sorbitan monooleate, ethoxylated	Rabbit	No significant irritation
Solvent naphtha (petroleum), heavy aromatic	Rabbit	Mild irritant
Synthetic amorphous silica, fumed, crystalline-free	Rabbit	No significant irritation
Distillates (petroleum), hydrotreated middle	Rabbit	Mild irritant
1,2-Benzisothiazol-3(2H)-one	Rabbit	Corrosive

Sensitisation:

Skin Sensitisation

Name	Species	Value
Distillates (petroleum), hydrotreated light	Guinea pig	Not classified
White mineral oil (petroleum)	Guinea pig	Not classified
Naphtha (petroleum), hydrodesulfurized heavy	Guinea pig	Not classified
Glycerol	Guinea pig	Not classified
Sorbitan monooleate, ethoxylated	Guinea pig	Not classified
Solvent naphtha (petroleum), heavy aromatic	Guinea pig	Not classified
Synthetic amorphous silica, fumed, crystalline-free	Human and animal	Not classified
Distillates (petroleum), hydrotreated middle	Guinea pig	Not classified
1,2-Benzisothiazol-3(2H)-one	Guinea pig	Sensitising

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
Aluminium oxide	In Vitro	Not mutagenic
Distillates (petroleum), hydrotreated light	In Vitro	Not mutagenic
Distillates (petroleum), hydrotreated light	In vivo	Not mutagenic
White mineral oil (petroleum)	In Vitro	Not mutagenic
Sorbitan monooleate, ethoxylated	In Vitro	Not mutagenic
Solvent naphtha (petroleum), heavy aromatic	In Vitro	Not mutagenic
Solvent naphtha (petroleum), heavy aromatic	In vivo	Not mutagenic
Synthetic amorphous silica, fumed, crystalline-free	In Vitro	Not mutagenic
Distillates (petroleum), hydrotreated middle	In Vitro	Not mutagenic
Distillates (petroleum), hydrotreated middle	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
Distillates (petroleum), hydrotreated light	Not specified.	Not available	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
Sorbitan monooleate, ethoxylated	Ingestion	Rat	Some positive data exist, but the data are not

			sufficient for classification
Synthetic amorphous silica, fumed, crystalline-free	Not specified.	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
Distillates (petroleum), hydrotreated light	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
Distillates (petroleum), hydrotreated light	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	1 generation
Distillates (petroleum), hydrotreated light	Not specified.	Not classified for development	Rat	NOAEL Not available	1 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
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
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
Solvent naphtha (petroleum), heavy aromatic	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	2 generation
Solvent naphtha (petroleum), heavy aromatic	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	2 generation
Solvent naphtha (petroleum), heavy aromatic	Not specified.	Not classified for development	Rat	NOAEL Not available	2 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline-free	Ingestion	Not classified for development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis
Distillates (petroleum), hydrotreated middle	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	gestation into lactation
Distillates (petroleum), hydrotreated middle	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	28 days
Distillates (petroleum), hydrotreated middle	Not specified.	Not classified for development	Rat	NOAEL Not available	during gestation
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
Naphtha (petroleum), hydrodesulfurized heavy	Inhalation	central nervous system depression	May cause drowsiness or dizziness	similar compounds	NOAEL not available	
Naphtha (petroleum), hydrodesulfurized heavy	Ingestion	central nervous system depression	May cause drowsiness or dizziness	similar compounds	NOAEL not available	
Solvent naphtha (petroleum), heavy aromatic	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
1,2-Benzisothiazol-3(2H)-one	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
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
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
Naphtha (petroleum), hydrodesulfurized heavy	Inhalation	central nervous system	Causes damage to organs through prolonged or repeated exposure	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
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
Synthetic amorphous silica, fumed, crystalline-free	Inhalation	respiratory system | silicosis	Not classified	Human	NOAEL Not available	occupational exposure
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
Distillates (petroleum), hydrotreated light	Aspiration hazard
White mineral oil (petroleum)	Aspiration hazard
Naphtha (petroleum), hydrodesulfurized heavy	Aspiration hazard
Solvent naphtha (petroleum), heavy aromatic	Aspiration hazard
Distillates (petroleum), hydrotreated middle	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.

SECTION 12: Ecological information

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

12.1. Toxicity
Ecotoxic to the aquatic environment.
Hazardous to the aquatic environment chronic: Category 3

No product test data available.

Material	CAS Number	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
Distillates (petroleum), hydrotreated light	64742-47-8	Green algae	Experimental	72 hours	EL50	>1,000 mg/l
Distillates (petroleum), hydrotreated light	64742-47-8	Rainbow trout	Experimental	96 hours	LL50	>1,000 mg/l
Distillates (petroleum), hydrotreated light	64742-47-8	Water flea	Experimental	48 hours	EL50	>1,000 mg/l
Distillates (petroleum), hydrotreated light	64742-47-8	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	8042-47-5	Green algae	Analogous	72 hours	NOEL	100 mg/l

oil (petroleum)			Compound			
White mineral oil (petroleum)	8042-47-5	Water flea	Analogous Compound	21 days	NOEL	>100 mg/l
Glycerol	56-81-5	Bacteria	Experimental	16 hours	NOEC	10,000 mg/l
Glycerol	56-81-5	Rainbow trout	Experimental	96 hours	LC50	54,000 mg/l
Glycerol	56-81-5	Water flea	Experimental	48 hours	LC50	1,955 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Green algae	Estimated	72 hours	EL50	4.1 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Rainbow trout	Estimated	96 hours	LL50	30 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Water flea	Estimated	48 hours	EL50	22 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Green algae	Estimated	72 hours	NOEL	0.76 mg/l
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Water flea	Estimated	21 days	EC10	0.879 mg/l
Sorbitan monooleate, ethoxylated	9005-65-6	Copepod	Analogous Compound	48 hours	LL50	>10,000 mg/l
Sorbitan monooleate, ethoxylated	9005-65-6	Green algae	Analogous Compound	72 hours	EL50	58.84 mg/l
Sorbitan monooleate, ethoxylated	9005-65-6	Zebra Fish	Analogous Compound	96 hours	LC50	>100 mg/l
Sorbitan monooleate, ethoxylated	9005-65-6	Green algae	Analogous Compound	72 hours	EC10	19.05 mg/l
Sorbitan monooleate, ethoxylated	9005-65-6	Water flea	Analogous Compound	21 days	NOEL	10 mg/l
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	Green algae	Estimated	72 hours	EL50	1 mg/l
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	Rainbow trout	Estimated	96 hours	LL50	2 mg/l
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	Water flea	Estimated	48 hours	EL50	3 mg/l
Solvent naphtha	64742-94-5	Green algae	Estimated	72 hours	NOEL	1 mg/l

(petroleum), heavy aromatic						
Distillates (petroleum), hydrotreated middle	64742-46-7	Green algae	Estimated	72 hours	EL50	>1,000 mg/l
Distillates (petroleum), hydrotreated middle	64742-46-7	Rainbow trout	Estimated	96 hours	LL50	>87,556 mg/l
Distillates (petroleum), hydrotreated middle	64742-46-7	Water flea	Estimated	48 hours	LL50	>1,000 mg/l
Distillates (petroleum), hydrotreated middle	64742-46-7	Green algae	Estimated	72 hours	NOEL	1,000 mg/l
Distillates (petroleum), hydrotreated middle	64742-46-7	Water flea	Estimated	21 days	NOEL	5 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Green algae	Analogous Compound	72 hours	ErC50	>173.1 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Sediment organism	Analogous Compound	96 hours	EC50	8,500 mg/kg (Dry Weight)
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Water flea	Analogous Compound	24 hours	EL50	>10,000 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Zebra Fish	Analogous Compound	96 hours	LL50	>10,000 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Green algae	Analogous Compound	72 hours	NOEC	173.1 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Water flea	Analogous Compound	21 days	NOEC	68 mg/l
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Alcohols, C16-18 and C18-unsatd. unsaturated alkyl alcohol	68002-94-8	Water flea	Experimental	48 hours	EC50	70 mg/l

and SDA Reporting Number: 11-060-00. Consult SDA Substance Identification Procedure.						
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Green algae	Experimental	72 hours	ErC50	0.11 mg/l
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Rainbow trout	Experimental	96 hours	LC50	1.6 mg/l
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Sheepshead Minnow	Experimental	96 hours	LC50	16.7 mg/l
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Water flea	Experimental	48 hours	EC50	2.9 mg/l
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Green algae	Experimental	72 hours	NOEC	0.0403 mg/l
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Activated sludge	Experimental	3 hours	EC50	12.8 mg/l
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Bobwhite quail	Experimental	14 days	LD50	617 mg per kg of bodyweight
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Cabbage	Experimental	14 days	EC50	200 mg/kg (Dry Weight)
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Redworm	Experimental	14 days	LC50	>410.6 mg/kg (Dry Weight)
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Soil microbes	Experimental	28 days	EC50	>811.5 mg/kg (Dry Weight)

12.2. Persistence and degradability

Material	CAS Number	Test type	Duration	Study Type	Test result	Protocol
Aluminium oxide	1344-28-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated light	64742-47-8	Estimated 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)
Naphtha	64742-82-1	Estimated	28 days	BOD	74.7 %BOD/Th	OECD 301F -

(petroleum), hydrodesulfurized heavy		Biodegradation			OD	Manometric respirometry
Sorbitan monooleate, ethoxylated	9005-65-6	Experimental Biodegradation	28 days	CO2 evolution	61 %CO2 evolution/THCO2 evolution	ISO 14593 Inorg C Headspace
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	Experimental Biodegradation	28 days	BOD	49.6 %BOD/ThOD	OECD 301F - Manometric respirometry
Distillates (petroleum), hydrotreated middle	64742-46-7	Estimated Biodegradation	28 days	BOD	74 %BOD/ThOD	OECD 306(Misc)-Biodegrad. Seaw
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Alcohols, C16-18 and C18-unsatd. unsaturated alkyl alcohol and SDA Reporting Number: 11-060-00. Consult SDA Substance Identification Procedure.	68002-94-8	Experimental Biodegradation	28 days	BOD	87 %BOD/ThOD	OECD 301D - Closed bottle test
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Experimental Biodegradation	28 days	BOD	0 %BOD/ThOD	OECD 301C - MITI test (I)
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Experimental Aquatic Inherent Biodegrad.	34 days	Dissolv. Organic Carbon Deplet	17 % removal of DOC	OECD 302A - Modified SCAS Test
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Experimental Biodegradation	21 days	Dissolv. Organic Carbon Deplet	80 % removal of DOC	OECD 303A - Simulated Aerobic
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Experimental Biodegradation		Half-life (t 1/2)	4 hours (t 1/2)	
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Experimental Hydrolysis		Hydrolytic half-life	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH

12.3 : Bioaccumulative potential

Material	CAS Number	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

Distillates (petroleum), hydrotreated light	64742-47-8	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	-1.76	
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Sorbitan monooleate, ethoxylated	9005-65-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Solvent naphtha (petroleum), heavy aromatic	64742-94-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), hydrotreated middle	64742-46-7	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Synthetic amorphous silica, fumed, crystalline-free	112945-52-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Alcohols, C16-18 and C18-unsatd. unsaturated alkyl alcohol and SDA Reporting Number: 11-060-00. Consult SDA Substance Identification Procedure.	68002-94-8	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 - Fish	56 days	Bioaccumulation factor	6.62	similar to OECD 305
1,2-Benzisothiazol-3(2H)-one	2634-33-5	Experimental Bioconcentration		Log Kow	1.45	OECD 107 log Kow shke flsk mtd

12.4. Mobility in soil
Please contact manufacturer for more details

12.5 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal methods
In accordance with the Hazardous Substances (Disposal) Notice 2017 and the relevant criteria of the HSNO Act 1996.

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.

Packaging (that may or may not contain any residual substance) may be lawfully disposed of by householders or other consumers through public or commercial waste collection services.

SECTION 14: Transport Information

New Zealand Land Transport Rule: Dangerous Goods - Road/Rail Transport
UN No.: Not applicable.
Proper Shipping Name: Not applicable.
Class/Division: Not applicable.
Sub Risk: Not applicable.
Packing Group: Not applicable.

Hazchem Code: Not applicable.
IERG: Not applicable.

International Air Transport Association (IATA) - Air Transport
UN No.: Not applicable.
Proper Shipping Name: Not applicable.
Class/Division: Not applicable.
Sub Risk: Not applicable.
Packing Group: Not applicable.

International Maritime Dangerous Goods Code (IMDG) - Marine Transport
UN No.: Not applicable.
Proper Shipping Name: Not applicable.
Class/Division: Not applicable.
Sub Risk: Not applicable.
Packing Group: Not applicable.
Marine Pollutant: Not applicable.

SECTION 15: Regulatory information

HSNO Approval number	HSR002670
Group standard name	Surface Coatings and Colourants (Subsidiary Hazard) Group Standard 2020
HSNO Hazard classification	Refer to Section 2: Hazard identification

NZ Inventory of Chemicals (NZIoC) Status
All applicable chemical ingredients in this material are in compliance with NZIoC listing requirements.

Controls in accordance with The Health and Safety at Work Act 2015, Health and Safety at Work (Hazardous

Substances) Regulations 2017 and the HSNO Act 1996, Hazardous Substances (Hazardous Property Controls) Notice 2017

Certified handler	Not required
Location Compliance Certificate	Not required
Hazardous atmosphere zone	Not required
Fire extinguishers	Not required
Emergency response plan	100 L or 100 kg (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L or 1 000 kg (for Acute toxicity Category 4, Skin sensitisation Category 1, Respiratory sensitisation Category 1, Hazardous to the aquatic environment Category 2 or Hazardous to the aquatic environment Category 3 substances); or 10 000 L or 10 000 kg (for Germ cell mutagenicity Category 1, Reproductive toxicity Category 1, Specific target organ toxicity Category 1, Serious eye damage Category 1, Hazardous to the aquatic environment Category 4 substances)
Secondary containment	100 L or 100 kg (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L or 1 000 kg (for Acute toxicity Category 4, Skin sensitisation Category 1, Respiratory sensitisation Category 1, Hazardous to the aquatic environment Category 2 or Hazardous to the aquatic environment Category 3 substances); or 10 000 L or 10 000 kg (for Germ cell mutagenicity Category 1, Reproductive toxicity Category 1, Specific target organ toxicity Category 1, Serious eye damage Category 1, Hazardous to the aquatic environment Category 4 substances)
Tracking	Not required
Warning signage	100 L or 100 kg (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L or 1 000 kg (for Serious eye damage Category 1, Hazardous to the aquatic environment Category 2 or Hazardous to the aquatic environment Category 3 substances); or 10 000 L or 10 000 kg (for Acute toxicity Category 4 or Hazardous to the aquatic environment Category 4 substances)

SECTION 16: Other information

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Complete document review.

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Key to abbreviations and acronyms
GHS refers to the Globally Harmonised System of Classification and Labelling of Chemicals, 7th revised edition of 2017
HSNO means Hazardous Substances and New Organisms Act 1996

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