



Safety Data Sheet

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|------------------------|------------|-------------------------|------------|
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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(TM) Rapid Multi-Enzyme Cleaner (RMEC) 70500-D & 70500-B

Product Identification Numbers

AH-0105-8299-9 AH-1000-1721-1

1.2. Recommended use and restrictions on use

Recommended use

Product concentrate to be diluted prior to use for cleaning medical, surgical and dental instruments via manual or automated cleaning systems.

For 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

Flammable Liquid: Category 4
Skin Corrosion/Irritation: Category 2
Serious Eye Damage/Irritation: Category 2
Respiratory Sensitizer: Category 1
Skin Sensitizer: Category 1A.
Reproductive Toxicity: Category 1B

Specific Target Organ Toxicity (single exposure): Category 2

Chronic Aquatic Toxicity: Category 3

2.2. Label elements

SIGNAL WORD

Danger

Symbols:

Health Hazard |

Pictograms



HAZARD STATEMENTS:

| | |
|------|---|
| H227 | Combustible Liquid |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction. |
| H360 | May damage fertility or the unborn child. |
| H371 | May cause damage to organs: cardiovascular system kidney/urinary tract nervous system respiratory system. |
| H412 | Harmful to aquatic life with long lasting effects. |

PRECAUTIONARY STATEMENTS

Prevention

| | |
|------|--|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P264 | Wash thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P284 | Wear respiratory protection. |

Response

| | |
|--------------------|--|
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P308 + P313 | IF exposed or concerned: Get medical advice/attention. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337 + P313 | IF eye irritation persists: Get medical advice/attention. |
| P342 + P311 | If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |

P370 + P378

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

Storage

P403

Store in a well-ventilated place.

P405

Store locked up.

Disposal

P501

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

SECTION 3: Composition/information on ingredients

| Ingredient | CAS Nbr | % by Weight |
|--|----------------|--------------------|
| Water | 7732-18-5 | 45 - 55 |
| Alcohols, C12-14, ethoxylated propoxylated | 68439-51-0 | 10 - 30 |
| Dipropylene glycol methyl ether | 34590-94-8 | 5 - 15 |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | 7 - 13 |
| Ethylene glycol | 107-21-1 | 5 - 10 |
| Borax | 1303-96-4 | 1 - 5 |
| Protein Protease Enzyme | 9014-01-1 | 1 - 5 |
| Glycerine | Trade Secret | 1 - 5 |
| Propane-1,2-diol | Trade Secret | 1 - 5 |
| 1-Dodecyl-2-Pyrrolidone | 2687-96-9 | 0.1 - 1 |
| Sodium Hydroxide | 1310-73-2 | 0.1 - 1 |
| Enzyme | Trade Secret | 0.1 - 1 |
| Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1) | 55965-84-9 | < 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

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

Eye contact

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

A product risk assessment is recommended to determine if eye wash facilities may be required when using this product in the workplace.

If swallowed

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

4.2. Most important symptoms and effects, both acute and delayed

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required

This product contains ethylene glycol. If there is reasonable suspicion of ethylene glycol poisoning, intravenous (IV) administration with either fomepizole (preferred) or ethanol (if fomepizole is unavailable) should be considered as part of the medical management.

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

| <u>Substance</u> | <u>Condition</u> |
|----------------------------|-------------------------|
| Aldehydes. | During combustion. |
| Hydrocarbons. | During combustion. |
| Carbon monoxide. | During combustion. |
| Carbon dioxide. | During combustion. |
| Irritant vapours or gases. | During combustion. |

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

5.4. Hazchem code: Not applicable.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a 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 skin contact with hot material. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. 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. 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.) Use personal protective equipment (eg. gloves, respirators...) as required.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Store away from heat. Store away from acids. Store away from strong bases. 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 |
|---------------------------------|--------------|-----------------|---|------------------------------------|
| Ethylene glycol | 107-21-1 | ACGIH | TWA(Vapour fraction):25 ppm;STEL(Vapour fraction):50 ppm;STEL(Inhalable aerosol):10 mg/m3 | A4: Not class. as human carcinogen |
| Ethylene glycol | 107-21-1 | New Zealand WES | CEIL(Vapor and mist):127 mg/m3(50 ppm) | |
| Borax | 1303-96-4 | ACGIH | TWA(inhalable fraction):2 mg/m3;STEL(inhalable fraction):6 mg/m3 | A4: Not class. as human carcinogen |
| Borax | 1303-96-4 | New Zealand WES | TWA(8 hours):5 mg/m3 | |
| Sodium Hydroxide | 1310-73-2 | ACGIH | CEIL:2 mg/m3 | |
| Sodium Hydroxide | 1310-73-2 | New Zealand WES | CEIL:2 mg/m3 | |
| Dipropylene glycol methyl ether | 34590-94-8 | ACGIH | TWA:50 ppm;STEL:100 ppm | |
| Dipropylene glycol methyl ether | 34590-94-8 | New Zealand WES | TWA(8 hours): 606 mg/m3 (100 ppm); STEL(15 minutes): 909 mg/m3 (150 ppm) | Skin |
| Protein Protease Enzyme | 9014-01-1 | ACGIH | CEIL (as pure crystalline enzyme): 0.00006 mg/m3 | |
| Protein Protease Enzyme | 9014-01-1 | New Zealand WES | CEIL (as pure crystalline enzyme): 0.00006 mg/m3 | Respiratory sensitiser, SKIN |
| Glycerine | Trade Secret | New Zealand WES | TWA(as mist)(8 hours):10 mg/m3 | |
| Propane-1,2-diol | Trade Secret | AIHA | TWA(as aerosol):10 mg/m3 | |
| Propane-1,2-diol | Trade Secret | New Zealand WES | TWA(Vapor and particulates)(8 hours):474 mg/m3(150 ppm);TWA(as particulate)(8 hours):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:

Full face shield.

Indirect vented goggles.

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

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

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic 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.

Thermal hazards

Wear heat insulating gloves, indirect vented goggles, and a full face shield when handling hot material to prevent thermal burns.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|--|
| Physical state | Liquid. |
| Specific Physical Form: | Liquid. |
| Colour | Fluorescent Green, Light Green |
| Odour | Citrus |
| Odour threshold | <i>No data available.</i> |
| pH | 6.5 - 6.9 [<i>Details: Neat @ 25 degrees C</i>] |
| Melting point/Freezing point | <i>No data available.</i> |
| Boiling point/Initial boiling point/Boiling range | <i>No data available.</i> |
| Flash point | 75 °C [<i>Test Method: Pensky-Martens Closed Cup</i>] [<i>Details: Greater than 75C self extinguishing</i>] |
| Evaporation rate | <i>No data available.</i> |
| Flammability (solid, gas) | Not applicable. |
| Flammable Limits(LEL) | <i>No data available.</i> |
| Flammable Limits(UEL) | <i>No data available.</i> |
| Vapour pressure | <i>No data available.</i> |
| Vapor Density and/or Relative Vapor Density | <i>No data available.</i> |
| Density | <i>No data available.</i> |
| Relative density | 1 - 1.1 [<i>Ref Std: WATER=1</i>] |
| Water solubility | <i>No data available.</i> |
| Solubility- non-water | <i>No data available.</i> |
| Partition coefficient: n-octanol/water | <i>No data available.</i> |
| Autoignition temperature | <i>No data available.</i> |
| Decomposition temperature | <i>No data available.</i> |
| Viscosity/Kinematic Viscosity | <i>No data available.</i> |
| Volatile organic compounds (VOC) | <i>No data available.</i> |
| Percent volatile | <i>No data available.</i> |
| VOC less H2O & exempt solvents | <i>No data available.</i> |

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.

Light.

10.5 Incompatible materials

Strong acids.

Strong bases.

Strong oxidising agents.

10.6 Hazardous decomposition products

Substance

None known.

Condition

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

Allergic respiratory reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

Skin contact

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

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

Eye contact

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

Ingestion

May be harmful if swallowed.

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

May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

Cardiac effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal. Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure. Kidney/Bladder effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

| Name | Route | Species | Value |
|---------------------------------|-----------|---------|---|
| Overall product | Dermal | | No data available; calculated ATE >5,000 mg/kg |
| Overall product | Ingestion | | No data available; calculated ATE >2,000 - =5,000 mg/kg |
| Dipropylene glycol methyl ether | Dermal | Rabbit | LD50 > 19,000 mg/kg |

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| | | | |
|--|--------------------------------|--------|------------------------------------|
| Dipropylene glycol methyl ether | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 50 mg/l |
| Dipropylene glycol methyl ether | Ingestion | Rat | LD50 5,180 mg/kg |
| Benzenesulfonic acid, C10-16-alkyl derivs. | Dermal | Rabbit | LD50 2,000 mg/kg |
| Benzenesulfonic acid, C10-16-alkyl derivs. | Ingestion | Rat | LD50 > 300, < 2000 mg/kg |
| Ethylene glycol | Ingestion | Human | LD50 1,600 mg/kg |
| Ethylene glycol | Inhalation-Dust/Mist (4 hours) | Other | LC50 estimated to be 5 - 12.5 mg/l |
| Ethylene glycol | Dermal | Rabbit | 9,530 mg/kg |
| Propane-1,2-diol | Dermal | Rabbit | LD50 20,800 mg/kg |
| Propane-1,2-diol | Ingestion | Rat | LD50 22,000 mg/kg |
| Borax | Dermal | Rabbit | LD50 > 10,000 mg/kg |
| Borax | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 2.03 mg/l |
| Borax | Ingestion | Rat | LD50 4,500 mg/kg |
| Glycerine | Dermal | Rabbit | LD50 estimated to be > 5,000 mg/kg |
| Glycerine | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Protein Protease Enzyme | Dermal | | estimated to be > 5,000 mg/kg |
| Protein Protease Enzyme | Inhalation-Dust/Mist | | estimated to be > 12.5 mg/l |
| Protein Protease Enzyme | Ingestion | | estimated to be > 5,000 mg/kg |
| 1-Dodecyl-2-Pyrrolidone | Dermal | | estimated to be > 5,000 mg/kg |
| 1-Dodecyl-2-Pyrrolidone | Inhalation-Dust/Mist | | estimated to be > 12.5 mg/l |
| 1-Dodecyl-2-Pyrrolidone | Ingestion | | estimated to be > 5,000 mg/kg |
| Enzyme | Dermal | | estimated to be > 5,000 mg/kg |
| Enzyme | Inhalation-Dust/Mist | | estimated to be > 12.5 mg/l |
| Enzyme | Ingestion | | 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 0.33 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 |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|-------------------|---------------------------|
| Dipropylene glycol methyl ether | Human and animal | No significant irritation |
| Benzenesulfonic acid, C10-16-alkyl derivs. | similar compounds | Minimal irritation |
| Ethylene glycol | Rabbit | Minimal irritation |
| Propane-1,2-diol | Rabbit | No significant irritation |
| Glycerine | Rabbit | No significant irritation |
| Sodium Hydroxide | Rabbit | Corrosive |
| Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1) | Rabbit | Corrosive |

Serious Eye Damage/Irritation

| Name | Species | Value |
|------|---------|-------|
|------|---------|-------|

| | | |
|--|-------------------|---------------------------|
| | | |
| Dipropylene glycol methyl ether | Rabbit | Mild irritant |
| Benzenesulfonic acid, C10-16-alkyl derivs. | similar compounds | Severe irritant |
| Ethylene glycol | Rabbit | Mild irritant |
| Propane-1,2-diol | Rabbit | No significant irritation |
| Glycerine | Rabbit | No significant irritation |
| Sodium Hydroxide | Rabbit | Corrosive |
| Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1) | Rabbit | Corrosive |

Sensitisation:

Skin Sensitisation

| Name | Species | Value |
|--|------------------|--|
| Dipropylene glycol methyl ether | Human | Not classified |
| Benzenesulfonic acid, C10-16-alkyl derivs. | Human | Some positive data exist, but the data are not sufficient for classification |
| Ethylene glycol | Human | Not classified |
| Propane-1,2-diol | Human | Not classified |
| Glycerine | Guinea pig | Not classified |
| Sodium Hydroxide | Human | Not classified |
| Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1) | Human and animal | 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 sensitizing |

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 |
|--|----------|--|
| Dipropylene glycol methyl ether | In Vitro | Not mutagenic |
| Benzenesulfonic acid, C10-16-alkyl derivs. | In Vitro | Not mutagenic |
| Ethylene glycol | In Vitro | Not mutagenic |
| Ethylene glycol | In vivo | Not mutagenic |
| Propane-1,2-diol | In Vitro | Not mutagenic |
| Propane-1,2-diol | In vivo | Not mutagenic |
| Sodium Hydroxide | 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 |

Carcinogenicity

| Name | Route | Species | Value |
|------------------|-----------|-------------------------|------------------|
| Ethylene glycol | Ingestion | Multiple animal species | Not carcinogenic |
| Propane-1,2-diol | Dermal | Mouse | Not carcinogenic |

| | | | |
|--|-----------|-------------------------|--|
| Propane-1,2-diol | Ingestion | Multiple animal species | Not carcinogenic |
| Glycerine | 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 |
|--|------------|--|-------------------------|------------------------|----------------------|
| Dipropylene glycol methyl ether | Inhalation | Not classified for development | Multiple animal species | NOAEL 1.82 mg/l | during organogenesis |
| Ethylene glycol | Dermal | Not classified for development | Mouse | NOAEL 3,549 mg/kg/day | during organogenesis |
| Ethylene glycol | Ingestion | Not classified for development | Mouse | LOAEL 750 mg/kg/day | during organogenesis |
| Ethylene glycol | Inhalation | Not classified for development | Mouse | NOAEL 1,000 mg/kg/day | during organogenesis |
| Propane-1,2-diol | Ingestion | Not classified for female reproduction | Mouse | NOAEL 10,100 mg/kg/day | 2 generation |
| Propane-1,2-diol | Ingestion | Not classified for male reproduction | Mouse | NOAEL 10,100 mg/kg/day | 2 generation |
| Propane-1,2-diol | Ingestion | Not classified for development | Multiple animal species | NOAEL 1,230 mg/kg/day | during organogenesis |
| Glycerine | Ingestion | Not classified for female reproduction | Rat | NOAEL 2,000 mg/kg/day | 2 generation |
| Glycerine | Ingestion | Not classified for male reproduction | Rat | NOAEL 2,000 mg/kg/day | 2 generation |
| Glycerine | Ingestion | Not classified for development | Rat | NOAEL 2,000 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 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 |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---------------------------------|------------|-----------------------------------|-------------------------|---------|-------------------|-------------------|
| Dipropylene glycol methyl ether | Dermal | central nervous system depression | Not classified | Rabbit | NOAEL 2,850 mg/kg | |
| Dipropylene glycol methyl ether | Inhalation | central nervous system depression | Not classified | Rat | LOAEL 3.07 mg/l | 7 hours |
| Dipropylene glycol methyl ether | Ingestion | central nervous system depression | Not classified | Rat | LOAEL 5,000 mg/kg | |
| Ethylene glycol | Ingestion | heart nervous | Causes damage to organs | Human | NOAEL Not | poisoning |

| | | | | | | |
|--|------------|---|--|------------------------|---------------------|------------------------|
| | | system kidney and/or bladder respiratory system | | | available | and/or abuse |
| Ethylene glycol | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | poisoning and/or abuse |
| Ethylene glycol | Ingestion | liver | Not classified | Human | NOAEL Not available | poisoning and/or abuse |
| Propane-1,2-diol | Ingestion | central nervous system depression | Not classified | Human and animal | NOAEL Not available | |
| Sodium Hydroxide | Inhalation | respiratory irritation | May cause respiratory irritation | Human | 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 | 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 |
|---------------------------------|------------|---|--|-------------------------|------------------------|-------------------|
| Dipropylene glycol methyl ether | Dermal | kidney and/or bladder heart endocrine system hematopoietic system liver respiratory system | Not classified | Rabbit | NOAEL 9,500 mg/kg/day | 90 days |
| Dipropylene glycol methyl ether | Inhalation | heart hematopoietic system liver immune system nervous system eyes kidney and/or bladder | Not classified | Rat | NOAEL 1.21 mg/l | 90 days |
| Dipropylene glycol methyl ether | Ingestion | liver heart endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system nervous system kidney and/or bladder respiratory system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 28 days |
| Ethylene glycol | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 200 mg/kg/day | 2 years |
| Ethylene glycol | Ingestion | vascular system | Not classified | Rat | NOAEL 200 mg/kg/day | 2 years |
| Ethylene glycol | Ingestion | heart hematopoietic system liver immune system muscles | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| Ethylene glycol | Ingestion | respiratory system | Not classified | Mouse | NOAEL 12,000 mg/kg/day | 2 years |
| Ethylene glycol | Ingestion | skin endocrine system bone, teeth, nails, and/or hair nervous system eyes | Not classified | Multiple animal species | NOAEL 1,000 mg/kg/day | 2 years |
| Propane-1,2-diol | Ingestion | hematopoietic system | Not classified | Multiple animal species | NOAEL 1,370 mg/kg/day | 117 days |
| Propane-1,2-diol | Ingestion | kidney and/or bladder | Not classified | Dog | NOAEL 5,000 mg/kg/day | 104 weeks |
| Glycerine | Inhalation | respiratory system | Not classified | Rat | NOAEL 3.91 | 14 days |

| | | | | | | |
|-----------|-----------|---|----------------|-----|------------------------------|---------|
| | | heart liver kidney and/or bladder | | | mg/l | |
| Glycerine | Ingestion | endocrine system hematopoietic system liver kidney and/or bladder | Not classified | Rat | NOAEL 10,000 mg/kg/day | 2 years |

Aspiration Hazard

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

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

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.

Acute Aquatic Toxicity: Category 2

Chronic Aquatic Toxicity: Category 3

No product test data available.

| Material | CAS Number | Organism | Type | Exposure | Test endpoint | Test result |
|--|------------|----------------|---|----------|---------------|--------------|
| Alcohols, C12-14, ethoxylated propoxylated | 68439-51-0 | | Data not available or insufficient for classification | | | N/A |
| Dipropylene glycol methyl ether | 34590-94-8 | Bacteria | Experimental | 18 hours | EC10 | 4,168 mg/l |
| Dipropylene glycol methyl ether | 34590-94-8 | Fathead minnow | Experimental | 96 hours | LC50 | >10,000 mg/l |
| Dipropylene glycol methyl ether | 34590-94-8 | Green algae | Experimental | 72 hours | EC50 | >969 mg/l |
| Dipropylene glycol methyl ether | 34590-94-8 | Water flea | Experimental | 48 hours | LC50 | 1,919 mg/l |
| Dipropylene glycol methyl ether | 34590-94-8 | Green algae | Experimental | 72 hours | EC10 | 133 mg/l |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Green algae | Analogous Compound | 96 hours | EC50 | 36 mg/l |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Rainbow trout | Experimental | 96 hours | LC50 | 4.3 mg/l |

| | | | | | | |
|--|--------------|------------------|--------------------|----------|-------|---------------------------|
| | | | | | | |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Water flea | Experimental | 48 hours | EC50 | 2.9 mg/l |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Fathead minnow | Analogous Compound | 28 days | NOEC | 0.9 mg/l |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Green algae | Analogous Compound | 72 hours | NOEC | 2.2 mg/l |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Water flea | Analogous Compound | 21 days | NOEC | 0.3 mg/l |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Activated sludge | Analogous Compound | 3 hours | EC50 | 550 mg/l |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Redworm | Analogous Compound | 14 days | LC50 | >1,000 mg/kg (Dry Weight) |
| Ethylene glycol | 107-21-1 | Bacteria | Experimental | 16 hours | EC50 | 10,000 mg/l |
| Ethylene glycol | 107-21-1 | Fathead minnow | Experimental | 96 hours | LC50 | 8,050 mg/l |
| Ethylene glycol | 107-21-1 | Green algae | Experimental | 72 hours | EC50 | >1,000 mg/l |
| Ethylene glycol | 107-21-1 | Water flea | Experimental | 48 hours | EC50 | >1,100 mg/l |
| Ethylene glycol | 107-21-1 | Green algae | Experimental | 72 hours | NOEC | 1,000 mg/l |
| Ethylene glycol | 107-21-1 | Water flea | Experimental | 21 days | NOEC | 100 mg/l |
| Borax | 1303-96-4 | Green algae | Analogous Compound | 72 hours | EC50 | 466 mg/l |
| Borax | 1303-96-4 | Water flea | Analogous Compound | 48 hours | EC50 | 1,240 mg/l |
| Borax | 1303-96-4 | Zebra Fish | Analogous Compound | 96 hours | LC50 | 123 mg/l |
| Borax | 1303-96-4 | Green algae | Analogous Compound | 72 hours | ErC10 | 309 mg/l |
| Borax | 1303-96-4 | Water flea | Analogous Compound | 21 days | EC10 | 156 mg/l |
| Borax | 1303-96-4 | Zebra Fish | Analogous Compound | 34 days | NOEC | 49 mg/l |
| Borax | 1303-96-4 | Activated sludge | Analogous Compound | 3 hours | EC50 | >1,540 mg/l |
| Glycerine | Trade Secret | Bacteria | Experimental | 16 hours | NOEC | 10,000 mg/l |
| Glycerine | Trade Secret | Rainbow trout | Experimental | 96 hours | LC50 | 54,000 mg/l |
| Glycerine | Trade Secret | Water flea | Experimental | 48 hours | LC50 | 1,955 mg/l |
| Propane-1,2-diol | Trade Secret | | Experimental | 10 days | LC50 | 6,983 mg/kg (Dry Weight) |
| Propane-1,2-diol | Trade Secret | | Experimental | 96 hours | LC50 | 18,800 mg/l |

| | | | | | | |
|--|--------------|------------------|---|----------|------|--------------|
| Propane-1,2-diol | Trade Secret | Green algae | Experimental | 96 hours | EC50 | 19,000 mg/l |
| Propane-1,2-diol | Trade Secret | Rainbow trout | Experimental | 96 hours | LC50 | 40,613 mg/l |
| Propane-1,2-diol | Trade Secret | Water flea | Experimental | 48 hours | EC50 | 18,340 mg/l |
| Propane-1,2-diol | Trade Secret | Green algae | Experimental | 96 hours | NOEC | 15,000 mg/l |
| Propane-1,2-diol | Trade Secret | Water flea | Experimental | 7 days | NOEC | 13,020 mg/l |
| Propane-1,2-diol | Trade Secret | Bacteria | Experimental | 18 hours | NOEC | >20,000 mg/l |
| Protein Protease Enzyme | 9014-01-1 | | Data not available or insufficient for classification | | | N/A |
| 1-Dodecyl-2-Pyrrolidone | 2687-96-9 | Green algae | Experimental | 96 hours | EC50 | 0.086 mg/l |
| 1-Dodecyl-2-Pyrrolidone | 2687-96-9 | Rainbow trout | Experimental | 96 hours | LC50 | 0.59 mg/l |
| 1-Dodecyl-2-Pyrrolidone | 2687-96-9 | Water flea | Experimental | 48 hours | EC50 | 0.139 mg/l |
| 1-Dodecyl-2-Pyrrolidone | 2687-96-9 | Green algae | Experimental | 96 hours | EC10 | 0.046 mg/l |
| 1-Dodecyl-2-Pyrrolidone | 2687-96-9 | Zebra Fish | Experimental | 35 days | EC10 | 0.018 mg/l |
| 1-Dodecyl-2-Pyrrolidone | 2687-96-9 | Activated sludge | Experimental | 3 hours | EC50 | 36.4 mg/l |
| Enzyme | Trade Secret | | Data not available or insufficient for classification | | | N/A |
| Sodium Hydroxide | 1310-73-2 | | Data not available or insufficient for classification | | | N/A |
| 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- | 55965-84-9 | Copepod | Experimental | 48 hours | EC50 | 0.007 mg/l |

| | | | | | | |
|--|------------|-------------------|--------------|----------|------|--------------|
| isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1) | | | | | | |
| 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 | EC50 | 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 | EC50 | 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- | 55965-84-9 | Fathead minnow | Experimental | 36 days | NOEL | 0.02 mg/l |

| | | | | | | |
|--|------------|-------------|--------------|----------|------|------------|
| methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1) | | | | | | |
| 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 |

12.2. Persistence and degradability

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|--|--------------|--|----------|--------------------------------|------------------------------------|-------------------------------------|
| Alcohols, C12-14, ethoxylated propoxylated | 68439-51-0 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Dipropylene glycol methyl ether | 34590-94-8 | Experimental Biodegradation | 28 days | BOD | 75 %BOD/ThO D | OECD 301F - Manometric respirometry |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Experimental Biodegradation | 28 days | CO2 evolution | 80 %CO2 evolution/THC O2 evolution | OECD 301B - Modified sturm or CO2 |
| Ethylene glycol | 107-21-1 | Experimental Biodegradation | 14 days | BOD | 90 %BOD/ThO D | OECD 301C - MITI test (I) |
| Borax | 1303-96-4 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Glycerine | Trade Secret | Experimental Biodegradation | 14 days | BOD | 63 %BOD/ThO D | OECD 301C - MITI test (I) |
| Propane-1,2-diol | Trade Secret | Experimental Biodegradation | 28 days | BOD | 90 %BOD/ThO D | OECD 301C - MITI test (I) |
| Propane-1,2-diol | Trade Secret | Experimental Biodegradation | 64 days | Dissolv. Organic Carbon Deplet | 95.8 % removal of DOC | OECD 306(Misc)-Biodegrad. Seaw |
| Protein Protease Enzyme | 9014-01-1 | Experimental Biodegradation | 28 days | BOD | 65-80 % weight | OECD 301D - Closed bottle test |
| 1-Dodecyl-2-Pyrrolidone | 2687-96-9 | Experimental Aquatic Inherent Biodegrad. | 28 days | Dissolv. Organic Carbon Deplet | 99.8 % removal of DOC | 40CFR 796.3340-Mod. SCAS test |

| Enzyme | Trade Secret | Experimental Biodegradation | 28 days | Dissolv. Organic Carbon Deplet | 99 % weight | OECD 301E - Modif. OECD Screen |
|--|--------------|-------------------------------|---------|--------------------------------|--|-----------------------------------|
| Sodium Hydroxide | 1310-73-2 | Data not availbl-insufficient | N/A | N/A | N/A | N/A |
| Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1) | 55965-84-9 | Estimated 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 | Estimated Photolysis | | Photolytic half-life (in air) | 1.2 days (t 1/2) | |
| 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 | > 60 days (t 1/2) | |

12.3 : Bioaccumulative potential

| Material | CAS Number | Test type | Duration | Study Type | Test result | Protocol |
|--|------------|---|----------|------------------------|-------------|--------------------------------|
| Alcohols, C12-14, ethoxylated propoxylated | 68439-51-0 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Dipropylene glycol methyl ether | 34590-94-8 | Experimental Bioconcentration | | Log Kow | 0.0061 | |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Analogous Compound BCF - Fish | 28 days | Bioaccumulation factor | 220 | |
| Benzenesulfonic acid, C10-16-alkyl derivs. | 68584-22-5 | Experimental Bioconcentration | | Log Kow | 2.0 | OECD 107 log Kow shke flsk mtd |
| Ethylene glycol | 107-21-1 | Experimental Bioconcentration | | Log Kow | -1.36 | |
| Borax | 1303-96-4 | Experimental Bioconcentration | | Log Kow | -1.53 | EC A.8 Partition Coefficient |

| | | | | | | |
|--|--------------|---|---------|------------------------|-------|------------------------------|
| Glycerine | Trade Secret | Experimental Bioconcentration | | Log Kow | -1.76 | |
| Propane-1,2-diol | Trade Secret | Experimental Bioconcentration | | Log Kow | -1.07 | EC A.8 Partition Coefficient |
| Protein Protease Enzyme | 9014-01-1 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 1-Dodecyl-2-Pyrrolidone | 2687-96-9 | Modeled Bioconcentration | | Bioaccumulation factor | 9.8 | Catalogic™ |
| 1-Dodecyl-2-Pyrrolidone | 2687-96-9 | Experimental Bioconcentration | | Log Kow | 4.03 | EC A.8 Partition Coefficient |
| Enzyme | Trade Secret | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Sodium Hydroxide | 1310-73-2 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (3:1) | 55965-84-9 | Estimated BCF - Fish | 28 days | Bioaccumulation factor | 54 | OECD305-Bioconcentration |

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 | HSR002525 |
| Group standard name | Cleaning Products (Combustible) 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 | Two required for 500 L |
| Emergency response plan | 100 L (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L (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 (for all other substances) |
| Secondary containment | 100 L (for Hazardous to the aquatic environment Category 1 substances); or 1 000 L (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 (for all other substances) |
| Tracking | Not required |
| Warning signage | 100 L (for Hazardous to the aquatic environment Category 1 substances); or 1 |

000 L (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 (for all other substances)

SECTION 16: Other information

Revision information:

Complete document review.

| | | | |
|------------------------|------------|-------------------------|------------|
| Document group: | 16-2468-3 | Version number: | 5.00 |
| Issue Date: | 07/08/2022 | Supersedes date: | 14/06/2018 |

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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