



Safety Data Sheet

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

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

1.1. Product identifier

3M (TM) Lens Cleaning Solution

Product Identification Numbers

DE-2729-5775-9 DE-2729-5776-7

7000062428 7000062429

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

Identified uses

Cleaning Spectacles and Goggles

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number

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.

CLASSIFICATION:

Flammable Liquid, Category 3 - Flam. Liq. 3; H226
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319

Skin Sensitization, Category 1 - Skin Sens. 1; H317
Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

For full text of H phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

WARNING.

Symbols

GHS02 (Flame) | GHS07 (Exclamation mark) |

Pictograms



Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
propan-2-ol	67-63-0	200-661-7	10 - 25
1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9	<= 0.05
2-methylisothiazol-3(2H)-one	2682-20-4	220-239-6	<= 0.05

HAZARD STATEMENTS:

H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.

PRECAUTIONARY STATEMENTS

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261E	Avoid breathing vapour or spray.

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P370 + P378	In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:

<=125 ml Hazard statements

H317	May cause an allergic skin reaction.
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<=125 ml Precautionary statements

Response:

P333 + P313

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

Notes on labelling

Updated per Regulation (EC) No. 648/2004 on detergents.

Ingredients required per 648/2004: <5% Anionic surfactant. Contains: METHYLISOTHIAZOLINONE; BENZISOTHIAZOLINONE.

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	75 - 90	Substance not classified as hazardous
propan-2-ol	(CAS-No.) 67-63-0 (EC-No.) 200-661-7 (REACH-No.) 01-2119457558-25	10 - 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
1,2-benzisothiazol-3(2H)-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9	<= 0.05	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400,M=1 Aquatic Chronic 1, H410,M=1
2-methylisothiazol-3(2H)-one	(CAS-No.) 2682-20-4 (EC-No.) 220-239-6	<= 0.05	Acute Tox. 2, H330 EUH071 Acute Tox. 3, H311 Acute Tox. 3, H301 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=1

Please see section 16 for the full text of any H statements referred to in this section

Specific Concentration Limits

Ingredient	Identifier(s)	Specific Concentration Limits
1,2-benzisothiazol-3(2H)-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9	(C >= 0.05%) Skin Sens. 1, H317
2-methylisothiazol-3(2H)-one	(CAS-No.) 2682-20-4	(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

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. 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). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

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 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

Substance

Carbon monoxide
Carbon dioxide.

Condition

During combustion.
During combustion.

5.3. Advice 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.

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 vapours, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapours 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. Cover spill area with a fire extinguishing foam that is resistant to polar solvents. 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 metal container approved for transportation by appropriate authorities. Clean up residue with water. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Protect from sunlight. Store away from heat. Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
propan-2-ol	67-63-0	Ireland OELs	TWA(8 hours):200 ppm;STEL(15 minutes):400 ppm	SKIN

Ireland OELs : Ireland. OELs
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

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

8.2. Exposure controls

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. Use explosion-proof ventilation 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.

Applicable Norms/Standards

Use eye/face protection conforming to EN 166

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

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

Material	Thickness (mm)	Breakthrough Time
Polymer laminate	No data available	No data available

Applicable Norms/Standards

Use gloves tested to EN 374

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

Respiratory protection

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

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

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 type A

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Colour	Colourless
Odor	Alcohol
Odour threshold	No data available.
Melting point/freezing point	No data available.
Boiling point/boiling range	100 °C
Flammability	Flammable liquid: Category 3.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Flash point	33 °C [Test Method: Closed Cup]
Autoignition temperature	No data available.
Decomposition temperature	No data available.
pH	7.5 - 8.5
Kinematic Viscosity	1 mm ² /sec
Water solubility	Soluble
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Vapour pressure	No data available.
Density	0.96 g/ml
Relative density	0.95 - 0.99 [Ref Std: WATER=1]
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.

Percent volatile

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

High shear and high temperature conditions

Sparks and/or flames.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Substance

Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from internal hazard assessments.

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

Signs and Symptoms of Exposure

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

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

Prolonged or repeated exposure may cause: Dermal Defatting: Signs/symptoms may include localized redness, itching, drying and cracking of skin. 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

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:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

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	Ingestion		No data available; calculated ATE >5,000 mg/kg
propan-2-ol	Dermal	Rabbit	LD50 12,870 mg/kg
propan-2-ol	Inhalation-Vapour (4 hours)	Rat	LC50 72.6 mg/l

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propan-2-ol	Ingestion	Rat	LD50 4,710 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
2-methylisothiazol-3(2H)-one	Dermal	Rat	LD50 242 mg/kg
2-methylisothiazol-3(2H)-one	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.11 mg/l
2-methylisothiazol-3(2H)-one	Ingestion	Rat	LD50 120 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
propan-2-ol	Multiple animal species	No significant irritation
1,2-benzisothiazol-3(2H)-one	Rabbit	No significant irritation
2-methylisothiazol-3(2H)-one	Rabbit	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
propan-2-ol	Rabbit	Severe irritant
1,2-benzisothiazol-3(2H)-one	Rabbit	Corrosive
2-methylisothiazol-3(2H)-one	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
propan-2-ol	Guinea pig	Not classified
1,2-benzisothiazol-3(2H)-one	Guinea pig	Sensitising
2-methylisothiazol-3(2H)-one	Human and animal	Sensitising

Photosensitisation

Name	Species	Value
2-methylisothiazol-3(2H)-one	Human and animal	Not sensitising

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
propan-2-ol	In Vitro	Not mutagenic
propan-2-ol	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
2-methylisothiazol-3(2H)-one	In vivo	Not mutagenic
2-methylisothiazol-3(2H)-one	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
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propan-2-ol	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
2-methylisothiazol-3(2H)-one	Dermal	Mouse	Not carcinogenic
2-methylisothiazol-3(2H)-one	Ingestion	Rat	Not carcinogenic

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test result	Exposure Duration
propan-2-ol	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	2 generation
propan-2-ol	Ingestion	Not classified for male reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
propan-2-ol	Ingestion	Not classified for development	Rat	NOAEL 400 mg/kg/day	during organogenesis
propan-2-ol	Inhalation	Not classified for development	Rat	LOAEL 9 mg/l	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
2-methylisothiazol-3(2H)-one	Ingestion	Not classified for female reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
2-methylisothiazol-3(2H)-one	Ingestion	Not classified for male reproduction	Rat	NOAEL 10 mg/kg/day	2 generation
2-methylisothiazol-3(2H)-one	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
propan-2-ol	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
propan-2-ol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	
propan-2-ol	Inhalation	auditory system	Not classified	Guinea pig	NOAEL 13.4 mg/l	24 hours
propan-2-ol	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	poisoning and/or abuse
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	
2-methylisothiazol-3(2H)-one	Inhalation	respiratory irritation	May cause respiratory irritation	similar health hazards	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
propan-2-ol	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 12.3 mg/l	24 months
propan-2-ol	Inhalation	nervous system	Not classified	Rat	NOAEL 12 mg/l	13 weeks
propan-2-ol	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 400 mg/kg/day	12 weeks
1,2-benzisothiazol-3(2H)-one	Ingestion	liver hematopoietic system eyes kidney and/or	Not classified	Rat	NOAEL 322 mg/kg/day	90 days

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		bladder respiratory system				
1,2-benzisothiazol-3(2H)-one	Ingestion	heart endocrine system nervous system	Not classified	Rat	NOAEL 150 mg/kg/day	28 days

Aspiration Hazard

For the component/components, either no data is currently available or the data is 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.

11.2. Information on other hazards

This material does not contain any substances that are assessed to be an endocrine disruptor for human health.

SECTION 12: Ecological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules and classifications derived from 3M assessments.

12.1. Toxicity

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
propan-2-ol	67-63-0	Bacteria	Experimental	16 hours	LOEC	1,050 mg/l
propan-2-ol	67-63-0	Green algae	Experimental	72 hours	EC50	>1,000 mg/l
propan-2-ol	67-63-0	Invertebrate	Experimental	24 hours	LC50	>10,000 mg/l
propan-2-ol	67-63-0	Medaka	Experimental	96 hours	LC50	>100 mg/l
propan-2-ol	67-63-0	Water flea	Experimental	48 hours	EC50	>1,000 mg/l
propan-2-ol	67-63-0	Green algae	Experimental	72 hours	NOEC	1,000 mg/l
propan-2-ol	67-63-0	Water flea	Experimental	21 days	NOEC	100 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Green algae	Experimental	72 hours	ErC50	0.11 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Rainbow trout	Experimental	96 hours	LC50	1.6 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Sheepshead Minnow	Experimental	96 hours	LC50	16.7 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Water flea	Experimental	48 hours	EC50	2.9 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Green algae	Experimental	72 hours	NOEC	0.0403 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Activated sludge	Experimental	3 hours	EC50	12.8 mg/l
1,2-benzisothiazol-3(2H)-one	2634-33-5	Bobwhite quail	Experimental	14 days	LD50	617 mg per kg of bodyweight
1,2-benzisothiazol-3(2H)-one	2634-33-5	Cabbage	Experimental	14 days	EC50	200 mg/kg (Dry Weight)
1,2-benzisothiazol-3(2H)-one	2634-33-5	Redworm	Experimental	14 days	LC50	>410.6 mg/kg (Dry Weight)
1,2-benzisothiazol-3(2H)-one	2634-33-5	Soil microbes	Experimental	28 days	EC50	>811.5 mg/kg (Dry Weight)

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2-methylisothiazol-3(2H)-one	2682-20-4	Diatom	Experimental	72 hours	ErC50	0.099 mg/l
2-methylisothiazol-3(2H)-one	2682-20-4	Green algae	Experimental	96 hours	ErC50	0.23 mg/l
2-methylisothiazol-3(2H)-one	2682-20-4	Mysid Shrimp	Experimental	96 hours	LC50	1.81 mg/l
2-methylisothiazol-3(2H)-one	2682-20-4	Sheepshead Minnow	Experimental	96 hours	LC50	25.1 mg/l
2-methylisothiazol-3(2H)-one	2682-20-4	Water flea	Experimental	48 hours	LC50	0.934 mg/l
2-methylisothiazol-3(2H)-one	2682-20-4	Blackworm	Experimental	28 days	NOEC	25 mg/kg (Dry Weight)
2-methylisothiazol-3(2H)-one	2682-20-4	Diatom	Experimental	72 hours	ErC10	0.04 mg/l
2-methylisothiazol-3(2H)-one	2682-20-4	Fathead minnow	Experimental	33 days	NOEC	2.1 mg/l
2-methylisothiazol-3(2H)-one	2682-20-4	Green algae	Experimental	96 hours	NOEC	0.12 mg/l
2-methylisothiazol-3(2H)-one	2682-20-4	Water flea	Experimental	21 days	NOEC	0.044 mg/l
2-methylisothiazol-3(2H)-one	2682-20-4	Activated sludge	Experimental	3 hours	EC50	41 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
propan-2-ol	67-63-0	Experimental Biodegradation	14 days	BOD	86 %BOD/ThO D	OECD 301C - MITI test (I)
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Biodegradation	28 days	BOD	0 %BOD/ThO D	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
2-methylisothiazol-3(2H)-one	2682-20-4	Experimental Biodegradation	29 days	CO2 evolution	50 %CO2 evolution/THC O2 evolution	OECD 301B - Modified sturm or CO2
2-methylisothiazol-3(2H)-one	2682-20-4	Experimental Hydrolysis		Hydrolytic half-life (pH 7)	>1 years (t 1/2)	OECD 111 Hydrolysis func of pH

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
propan-2-ol	67-63-0	Experimental Bioconcentration		Log Kow	0.05	
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
2-methylisothiazol-3(2H)-one	2682-20-4	Analogous Compound BCF - Fish	56 days	Bioaccumulation factor	5.75	
2-methylisothiazol-3(2H)-one	2682-20-4	Experimental Bioconcentration		Log Kow	-0.486	OECD 107 log Kow shke flsk mtd

12.4. Mobility in soil

Material	Cas No.	Test type	Study Type	Test result	Protocol
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental	Koc	9.33 l/kg	OECD 121 Estim. of Koc by

3M (TM) Lens Cleaning Solution

one		Mobility in Soil			HPLC
2-methylisothiazol-3(2H)-one	2682-20-4	Experimental Mobility in Soil	Koc	6.4-10 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.

The surfactant(s) contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

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

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. 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)

070604* Other organic solvents, washing liquids and mother liquors

SECTION 14: Transportation information

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number or ID number	UN1987	UN1987	UN1987
14.2 UN proper shipping name	ALCOHOLS, N.O.S.(ISOPROPYL ALCOHOL)	ALCOHOLS, N.O.S.(ISOPROPYL ALCOHOL)	ALCOHOLS, N.O.S.(ISOPROPYL ALCOHOL)
14.3 Transport hazard class(es)	3	3	3
14.4 Packing group	III	III	III

14.5 Environmental hazards	Not Environmentally Hazardous	Not applicable	Not a Marine Pollutant
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	F1	Not applicable.	Not applicable.
IMDG Segregation Code	Not applicable.	Not applicable.	NONE

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

Global inventory status

Contact 3M for more information.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

Hazard Categories	Qualifying quantity (tonnes) for the application of	
	Lower-tier requirements	Upper-tier requirements
P5c FLAMMABLE LIQUIDS*	5000	50000

*If maintained at a temperature above its boiling point or if particular processing conditions, such as high pressure or high temperature, may create major-accident hazards, P5a or P5b FLAMMABLE LIQUIDS may apply

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**

EUH071	Corrosive to the respiratory tract.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Revision information:

EU Section 09: pH information information was modified.
 CLP: Ingredient table information was modified.
 Label: CLP Classification information was modified.
 Label: CLP Percent Unknown information was deleted.
 Section 3: Composition/ Information of ingredients table information was modified.
 Section 03: SCL table information was modified.
 Section 04: First Aid - Symptoms and Effects (CLP) information was added.
 Section 04: Information on toxicological effects information was modified.
 Section 6: Accidental release clean-up information information was modified.
 Section 8: glove data value information was modified.
 Section 8: Personal Protection - Skin/hand information information was modified.
 Section 8: Skin protection - protective clothing information information was modified.
 Section 9: Flammability (solid, gas) information information was deleted.
 Section 09: Flammability information information was added.
 Section 09: Particle Characteristics N/A information was added.
 Section 9: Relative density information information was modified.
 Section 9: Solubility in water text information was added.
 Section 9: Solubility in water value information was deleted.
 Section 10.1: Reactivity information information was modified.
 Section 10: Conditions to avoid physical property information was modified.
 Section 11: Acute Toxicity table information was modified.
 Section 11: Germ Cell Mutagenicity Table information was modified.
 Section 11: Health Effects - Skin information 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 15: Seveso Hazard Category Text information was added.

Section 15: Seveso Substance Text information was deleted.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material. information was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

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