



## 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 Marine Finesse-It II Glaze, 09048, 35928, 35929

#### Product Identification Numbers

60-4550-8219-2

7100070599

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

##### Identified uses

Marine

#### 1.3. Details of the supplier of the safety data sheet

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

The aspiration hazard classification is not required due to the product's viscosity.

##### CLASSIFICATION:

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

Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

## 2.2. Label elements

CLP REGULATION (EC) No 1272/2008

### SIGNAL WORD

WARNING.

### Symbols

GHS07 (Exclamation mark) |

### Pictograms



### Ingredients:

Ingredient	CAS Nbr	EC No.	% by Wt
Alkyloammonium Salt		701-048-1	< 0.15
1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9	< 0.06

### HAZARD STATEMENTS:

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

### PRECAUTIONARY STATEMENTS

#### General:

P102	Keep out of reach of children.
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#### Prevention:

P280E	Wear protective gloves.
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#### Disposal:

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

#### Supplemental Hazard Statements:

EUH066	Repeated exposure may cause skin dryness or cracking.
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## 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**

<b>Ingredient</b>	<b>Identifier(s)</b>	<b>%</b>	<b>Classification according to Regulation (EC) No. 1272/2008 [CLP]</b>
Non hazardous ingredients	Mixture	40 - 70	Substance not classified as hazardous
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	(EC-No.) 926-141-6 (REACH-No.) 01-2119456620-43	5 - 10	Asp. Tox. 1, H304 EUH066
Aluminium oxide	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	5 - 10	Substance with a national occupational exposure limit
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	(EC-No.) 923-037-2	5 - 10	Aquatic Chronic 2, H411 Flam. Liq. 3, H226 Asp. Tox. 1, H304 EUH066
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	(EC-No.) 918-167-1	1 - 5	Flam. Liq. 3, H226 Aquatic Chronic 4, H413 Asp. Tox. 1, H304 EUH066
Glycerol	(CAS-No.) 56-81-5 (EC-No.) 200-289-5	< 5	Substance with a national occupational exposure limit
morpholine	(CAS-No.) 110-91-8 (EC-No.) 203-815-1	< 0.15	Flam. Liq. 3, H226 Acute Tox. 3, H311 Acute Tox. 4, H332 Acute Tox. 4, H302 Skin Corr. 1B, H314
Alkyloammonium Salt	(EC-No.) 701-048-1	< 0.15	Skin Sens. 1B, H317
1,2-benzisothiazol-3(2H)-one	(CAS-No.) 2634-33-5 (EC-No.) 220-120-9	< 0.06	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400,M=10 Aquatic Chronic 1, H410,M=1

Any entry in the Identifier(s) column that begins with the numbers 6, 7, 8, or 9 are a Provisional List Number provided by ECHA pending publication of the official EC Inventory Number for the substance.

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

**Specific Concentration Limits**

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

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

**SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

##### Inhalation

No need for first aid is anticipated. If symptoms develop, remove the affected person to fresh air. Get medical attention.

##### Skin contact

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

##### Eye contact

If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, get medical attention.

##### If swallowed

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

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

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

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

Not applicable

### SECTION 5: Fire-fighting measures

#### 5.1. Extinguishing media

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

#### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

#### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.

#### 5.3. Advice for fire-fighters

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

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

#### 6.2. Environmental precautions

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

#### 6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. 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**

Keep out of reach of children. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

**7.2. Conditions for safe storage including any incompatibilities**

No special storage requirements.

**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.

<b>Ingredient</b>	<b>CAS Nbr</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional comments</b>
morpholine	110-91-8	Ireland OELs	TWA(8 hours):36 mg/m <sup>3</sup> (10 ppm);TWA(8 hours):10 ppm(36 mg/m <sup>3</sup> );STEL(15 minutes):72 mg/m <sup>3</sup> (20 ppm);STEL(15 minutes):20 ppm(72 mg/m <sup>3</sup> )	SKIN
Aluminium oxide	1344-28-1	Ireland OELs	TWA(Total inhalable dust)(8 hours):10 mg/m <sup>3</sup> ;TWA(as respirable dust)(8 hours):4 mg/m <sup>3</sup>	
DUST, INERT OR NUISANCE	56-81-5	Ireland OELs	TWA(Total inhalable dust)(8 hours):10 mg/m <sup>3</sup> ;TWA(as respirable dust)(8 hours):4 mg/m <sup>3</sup>	

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.

## 8.2.2. Personal protective equipment (PPE)

### Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety glasses with side shields.

#### *Applicable Norms/Standards*

Use eye protection conforming to EN 166

### Skin/hand protection

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

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

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

When only incidental contact is anticipated, alternative glove material(s) may be used. If contact with the glove does occur, remove immediately and replace with a set of new gloves. For incidental contact, gloves made of the following material(s) may be used: Nitrile rubber.

#### *Applicable Norms/Standards*

Use gloves tested to EN 374

### Respiratory protection

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

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

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

#### *Applicable Norms/Standards*

Use a respirator conforming to EN 140 or EN 136: filter types A & P

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Specific Physical Form:	Liquid.
Colour	Colourless
Odor	Mild Odor
Odour threshold	No data available.
Melting point/freezing point	No data available.
Boiling point/boiling range	No data available.
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Flash point	Flash point > 93 °C (200 °F) [Test Method: Closed Cup]

Autoignition temperature	No data available.
Decomposition temperature	No data available.
pH	7.9 - 8.4
Kinematic Viscosity	9,569 mm <sup>2</sup> /sec
Water solubility	No data available.
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Vapour pressure	No data available.
Density	1.035 - 1.045 g/ml
Relative density	1.035 - 1.045 [Ref Std: WATER=1]
Relative Vapour Density	No data available.

## 9.2. Other information

### 9.2.2 Other safety characteristics

EU Volatile Organic Compounds	No data available.
Evaporation rate	No data available.
Percent volatile	86.4 % weight

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is considered to be non reactive under normal use conditions

### 10.2 Chemical stability

Stable.

### 10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### 10.4 Conditions to avoid

None known.

### 10.5 Incompatible materials

None known.

### 10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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

No known health effects.

### Skin contact

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

### Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

### Ingestion

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

### Toxicological Data

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

### Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Vapour(4 hr)		No data available; calculated ATE >50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Inhalation-Vapour	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
Aluminium oxide	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium oxide	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminium oxide	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Inhalation-Vapour	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Inhalation-Vapour	Professional judgement	LC50 estimated to be 20 - 50 mg/l
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Dermal	Rabbit	LD50 > 5,000 mg/kg
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Ingestion	Rat	LD50 > 5,000 mg/kg
Glycerol	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerol	Ingestion	Rat	LD50 > 5,000 mg/kg
Alkyloammonium Salt	Ingestion	Rat	LD50 > 5,385 mg/kg
Alkyloammonium Salt	Dermal	similar health hazards	LD50 estimated to be > 5,000 mg/kg
morpholine	Dermal	Rabbit	LD50 310 mg/kg
morpholine	Inhalation-Vapour	Rat	LC50 estimated to be 10 - 20 mg/l
morpholine	Ingestion	Rat	LD50 1,050 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
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Rabbit	Minimal irritation
Aluminium oxide	Rabbit	No significant irritation
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Rabbit	Mild irritant
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Rabbit	Mild irritant
Glycerol	Rabbit	No significant irritation
Alkyloammonium Salt	Rabbit	No significant irritation
morpholine	official classification	Corrosive
1,2-benzisothiazol-3(2H)-one	Rabbit	No significant irritation

### Serious Eye Damage/Irritation

Name	Species	Value
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Rabbit	Mild irritant
Aluminium oxide	Rabbit	No significant irritation
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Rabbit	Mild irritant
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Rabbit	Mild irritant
Glycerol	Rabbit	No significant irritation
Alkyloammonium Salt	Rabbit	No significant irritation
morpholine	Rabbit	Corrosive
1,2-benzisothiazol-3(2H)-one	Rabbit	Corrosive

### Skin Sensitisation

Name	Species	Value
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Guinea pig	Not classified
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Guinea pig	Not classified
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Guinea pig	Not classified
Glycerol	Guinea pig	Not classified
Alkyloammonium Salt	Mouse	Sensitising
morpholine	Guinea pig	Not classified
1,2-benzisothiazol-3(2H)-one	Guinea pig	Sensitising

### Respiratory Sensitisation

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

### Germ Cell Mutagenicity

Name	Route	Value
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	In Vitro	Not mutagenic
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	In vivo	Not mutagenic
Aluminium oxide	In Vitro	Not mutagenic
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	In Vitro	Not mutagenic
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	In vivo	Not mutagenic
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	In Vitro	Not mutagenic
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	In vivo	Not mutagenic
Alkyloammonium Salt	In Vitro	Not mutagenic
morpholine	In Vitro	Some positive data exist, but the data are not sufficient for classification

morpholine	In vivo	Some positive data exist, but the data are not sufficient for classification
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
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not available	Not carcinogenic
Aluminium oxide	Inhalation	Rat	Not carcinogenic
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Not specified.	Not available	Not carcinogenic
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Not specified.	Not available	Not carcinogenic
Glycerol	Ingestion	Mouse	Some positive data exist, but the data are not sufficient for classification
morpholine	Ingestion	Multiple animal species	Not carcinogenic
morpholine	Inhalation	Rat	Not carcinogenic

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	1 generation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	1 generation
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Not specified.	Not classified for development	Rat	NOAEL Not available	1 generation
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	premating & during gestation
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	28 days
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Not specified.	Not classified for development	Rat	NOAEL Not available	during gestation
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Not specified.	Not classified for female reproduction	Rat	NOAEL Not available	premating & during gestation
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Not specified.	Not classified for male reproduction	Rat	NOAEL Not available	28 days
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Not specified.	Not classified for development	Rat	NOAEL Not available	during gestation
Glycerol	Ingestion	Not classified for female reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerol	Ingestion	Not classified for male reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerol	Ingestion	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	2 generation
Alkyloammonium Salt	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000 mg/kg/day	premating into lactation
Alkyloammonium Salt	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Alkyloammonium Salt	Ingestion	Not classified for development	Rat	NOAEL 1,000 mg/kg/day	gestation into lactation
1,2-benzisothiazol-3(2H)-one	Ingestion	Not classified for female reproduction	Rat	NOAEL 112	2 generation

				mg/kg/day	
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
morpholine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		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
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
Alkyloammonium Salt	Ingestion	hematopoietic system   heart   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   liver   immune system   muscles   nervous system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	35 days
morpholine	Dermal	liver   kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Guinea pig	LOAEL 900 mg/kg/day	13 days
morpholine	Dermal	hematopoietic system	Not classified	Guinea pig	NOAEL 900 mg/kg/day	13 days
morpholine	Inhalation	eyes	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
morpholine	Inhalation	respiratory system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 0.09 mg/l	13 weeks
morpholine	Inhalation	liver   kidney and/or bladder	Not classified	Rat	LOAEL 64 mg/l	5 days
morpholine	Inhalation	heart   endocrine system	Not classified	Rat	NOAEL 0.9 mg/l	13 weeks
morpholine	Inhalation	gastrointestinal tract   nervous system	Not classified	Rat	NOAEL 0.53 mg/l	104 weeks
morpholine	Ingestion	kidney and/or bladder	May cause damage to organs though prolonged or repeated exposure	Rat	LOAEL 160 mg/kg/day	30 days
morpholine	Ingestion	liver   respiratory	Some positive data exist, but the	Rat	NOAEL 160	30 days

		system	data are not sufficient for classification		mg/kg/day	
morpholine	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 800 mg/kg/day	30 days
morpholine	Ingestion	endocrine system	Not classified	Rat	NOAEL 323 mg/kg/day	4 weeks
1,2-benzisothiazol-3(2H)-one	Ingestion	liver   hematopoietic system   eyes   kidney and/or bladder   respiratory system	Not classified	Rat	NOAEL 322 mg/kg/day	90 days
1,2-benzisothiazol-3(2H)-one	Ingestion	heart   endocrine system   nervous system	Not classified	Rat	NOAEL 150 mg/kg/day	28 days

### Aspiration Hazard

Name	Value
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	Aspiration hazard
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Aspiration hazard
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Aspiration hazard

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

### 11.2. Information on other hazards

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

## SECTION 12: Ecological information

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

### 12.1. Toxicity

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
Aluminium oxide	1344-28-1	Fish	Experimental	96 hours	LC50	>100 mg/l
Aluminium oxide	1344-28-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
Aluminium oxide	1344-28-1	Water flea	Experimental	48 hours	LC50	>100 mg/l
Aluminium oxide	1344-28-1	Green algae	Experimental	72 hours	NOEC	>100 mg/l
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Green algae	Experimental	72 hours	EL50	>1,000 mg/l
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Rainbow trout	Experimental	96 hours	LL50	>1,000 mg/l
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Water flea	Experimental	48 hours	EL50	>1,000 mg/l
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Green algae	Experimental	72 hours	NOEL	1,000 mg/l
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Water flea	Experimental	21 days	NOEL	1 mg/l

aromatics						
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Green algae	Experimental	72 hours	EL50	>1,000 mg/l
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Rainbow trout	Experimental	96 hours	LL50	>1,000 mg/l
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Water flea	Experimental	48 hours	EL50	>1,000 mg/l
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Green algae	Experimental	72 hours	NOEL	1,000 mg/l
Glycerol	56-81-5	Bacteria	Experimental	16 hours	NOEC	10,000 mg/l
Glycerol	56-81-5	Rainbow trout	Experimental	96 hours	LC50	54,000 mg/l
Glycerol	56-81-5	Water flea	Experimental	48 hours	LC50	1,955 mg/l
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	918-167-1	Green algae	Estimated	72 hours	EL50	>1,000 mg/l
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	918-167-1	Rainbow trout	Estimated	96 hours	LL50	>1,000 mg/l
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	918-167-1	Water flea	Estimated	48 hours	EL50	>1,000 mg/l
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	918-167-1	Green algae	Estimated	72 hours	NOEL	1,000 mg/l
Alkyloammonium Salt	701-048-1	Activated sludge	Experimental	3 hours	EC50	>1,000 mg/l
Alkyloammonium Salt	701-048-1	Green algae	Experimental	72 hours	EL50	105 mg/l
Alkyloammonium Salt	701-048-1	Rainbow trout	Experimental	96 hours	No tox obs at lmt of water sol	>100 mg/l
Alkyloammonium Salt	701-048-1	Water flea	Experimental	48 hours	No tox obs at lmt of water sol	>100 mg/l
Alkyloammonium Salt	701-048-1	Green algae	Experimental	72 hours	EL10	40 mg/l
morpholine	110-91-8	Activated sludge	Experimental	30 minutes	EC20	>1,000 mg/l
morpholine	110-91-8	Fish	Experimental	96 hours	LC50	100 mg/l
morpholine	110-91-8	Green algae	Experimental	96 hours	ErC50	28 mg/l
morpholine	110-91-8	Rainbow trout	Experimental	96 hours	LC50	180 mg/l
morpholine	110-91-8	Water flea	Experimental	48 hours	EC50	45 mg/l
morpholine	110-91-8	Green algae	Experimental	96 hours	NOEC	10 mg/l
morpholine	110-91-8	Water flea	Experimental	21 days	NOEC	5 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)

## 12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Aluminium oxide	1344-28-1	Data not availbl-insufficient	N/A	N/A	N/A	N/A
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Experimental Biodegradation	28 days	BOD	31.3 %BOD/ThOD	OECD 301F - Manometric respirometry
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Experimental Biodegradation	28 days	BOD	69 %BOD/ThOD	OECD 301F - Manometric respirometry
Glycerol	56-81-5	Experimental Biodegradation	14 days	BOD	63 %BOD/ThOD	OECD 301C - MITI test (I)
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	918-167-1	Estimated Biodegradation	28 days	BOD	31.3 %BOD/ThOD	
Alkyloammonium Salt	701-048-1	Experimental Biodegradation	28 days	BOD	23 %BOD/ThOD	OECD 301F - Manometric respirometry
morpholine	110-91-8	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	93 %removal of DOC	OECD 301E - Modif. OECD Screen
morpholine	110-91-8	Experimental Biodegradation	31 days	Dissolv. Organic Carbon Deplet	98 %removal of DOC	OECD 302B Zahn-Wellens/EVPA
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 No.	Test type	Duration	Study Type	Test result	Protocol
Aluminium oxide	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Estimated Bioconcentration		Log Kow	> 4	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerol	56-81-5	Experimental Bioconcentration		Log Kow	-1.76	
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	918-167-1	Estimated BCF - Fish		Bioaccumulation factor	2500	
Alkyloammonium Salt	701-048-1	Experimental Bioconcentration		Log Kow	< 1	OECD 117 log Kow HPLC method
morpholine	110-91-8	Experimental BCF - Fish	42 days	Bioaccumulation factor	<2.8	OECD305-Bioconcentration
morpholine	110-91-8	Experimental		Log Kow	-2.55	OECD 107 log Kow shke

		Bioconcentration				flsk mtd
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

Material	Cas No.	Test type	Study Type	Test result	Protocol
Glycerol	56-81-5	Estimated Mobility in Soil	Koc	<1 l/kg	Episuite™
Alkyloammonium Salt	701-048-1	Experimental Mobility in Soil	Koc	<316 l/kg	OECD 121 Estim. of Koc by HPLC
1,2-benzisothiazol-3(2H)-one	2634-33-5	Experimental Mobility in Soil	Koc	9.33 l/kg	OECD 121 Estim. of Koc by HPLC

#### 12.5. Results of the PBT and vPvB assessment

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

#### 12.6. Endocrine disrupting properties

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

#### 12.7. Other adverse effects

No information available.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

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

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

#### EU waste code (product as sold)

120109\* Machining emulsions and solutions free of halogens

### SECTION 14: Transportation information

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)

<b>14.1 UN number or ID number</b>	No data available.	No data available.	No data available.
<b>14.2 UN proper shipping name</b>	No data available.	No data available.	No data available.
<b>14.3 Transport hazard class(es)</b>	No data available.	No data available.	No data available.
<b>14.4 Packing group</b>	No data available.	No data available.	No data available.
<b>14.5 Environmental hazards</b>	No data available.	No data available.	No data available.
<b>14.6 Special precautions for user</b>	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.
<b>14.7 Marine Transport in bulk according to IMO instruments</b>	No data available.	No data available.	No data available.
<b>Control Temperature</b>	No data available.	No data available.	No data available.
<b>Emergency Temperature</b>	No data available.	No data available.	No data available.
<b>ADR Classification Code</b>	No data available.	No data available.	No data available.
<b>IMDG Segregation Code</b>	No data available.	No data available.	No data available.

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Carcinogenicity

Ingredient  
morpholine

CAS Nbr  
110-91-8

Classification  
Gr. 3: Not classifiable

Regulation  
International Agency  
for Research on Cancer

#### Global inventory status

Contact 3M for more information. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.



**DIRECTIVE 2012/18/EU**

Seveso hazard categories, Annex 1, Part 1

None

Seveso named dangerous substances, Annex 1, Part 2

Dangerous Substances	Identifier(s)	Qualifying quantity (tonnes) for the application of	
		Lower-tier requirements	Upper-tier requirements
1,2-benzisothiazol-3(2H)-one	2634-33-5	100	200
morpholine	110-91-8	10	50

**Regulation (EU) No 649/2012**

No chemicals listed

**15.2. Chemical Safety Assessment**

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

**SECTION 16: Other information****List of relevant H statements**

EUH066	Repeated exposure may cause skin dryness or cracking.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
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.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

**Revision information:**

EU Section 09: pH information information was added.

Section 1: Emergency telephone information was modified.

CLP: Ingredient table information was modified.

CLP Remark(phrase) information was deleted.

Label: CLP Precautionary - Response information was deleted.

Section 03: Composition table % Column heading information was added.

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

Section 03: SCL table information was added.

Section 03: Substance not applicable information was added.

Section 4: First aid for eye contact information information was modified.

Section 4: First aid for inhalation information information was modified.

Section 04: Information on toxicological effects information was modified.

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

Section 9: Evaporation Rate information information was deleted.

Section 9: Explosive properties information information was deleted.  
Section 09: Kinematic Viscosity information information was added.  
Section 9: Melting point information information was modified.  
Section 9: Oxidising properties information information was deleted.  
Section 9: pH information information was deleted.  
Section 9: Property description for optional properties information was modified.  
Section 9: Vapour density value information was added.  
Section 9: Vapour density value information was deleted.  
Section 9: Viscosity information information was deleted.  
Section 11: Acute Toxicity table information was modified.  
Section 11: Aspiration Hazard Table information was modified.  
Section 11: Carcinogenicity Table information was modified.  
Section 11: Classification disclaimer information was modified.  
Section 11: Germ Cell Mutagenicity Table information was modified.  
Section 11: No endocrine disruptor information available warning information was added.  
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 added.  
Section 11: Target Organs - Repeated Table information was deleted.  
Section 12: 12.6. Endocrine Disrupting Properties information was added.  
Section 12: 12.7. Other adverse effects information was modified.  
Section 12: Component ecotoxicity information information was modified.  
Section 12: Contact manufacturer for more detail. information was deleted.  
Section 12: Mobility in soil information information was added.  
Section 12: No endocrine disruptor information available warning information was added.  
Section 12: Persistence and Degradability information information was modified.  
Section 12: Bioaccumulative potential information information was modified.  
Section 14 Classification Code – Main Heading information was added.  
Section 14 Classification Code – Regulation Data information was added.  
Section 14 Control Temperature – Main Heading information was added.  
Section 14 Control Temperature – Regulation Data information was added.  
Section 14 Disclaimer Information information was added.  
Section 14 Emergency Temperature – Main Heading information was added.  
Section 14 Emergency Temperature – Regulation Data information was added.  
Section 14 Hazard Class + Sub Risk – Main Heading information was added.  
Section 14 Hazard Class + Sub Risk – Regulation Data information was added.  
Section 14 Hazardous/Not Hazardous for Transportation information was added.  
Section 14 Other Dangerous Goods – Main Heading information was added.  
Section 14 Other Dangerous Goods – Regulation Data information was added.  
Section 14 Packing Group – Main Heading information was added.  
Section 14 Packing Group – Regulation Data information was added.  
Section 14 Proper Shipping Name information was added.  
Section 14 Regulations – Main Headings information was added.  
Section 14 Segregation – Regulation Data information was added.  
Section 14 Segregation Code – Main Heading information was added.  
Section 14 Special Precautions – Main Heading information was added.  
Section 14 Special Precautions – Regulation Data information was added.  
Section 14 Transport in bulk – Regulation Data information was added.  
Section 14 Marine transport in bulk according to IMO instruments – Main Heading information was added.  
Section 14 UN Number Column data information was added.  
Section 14 UN Number information was added.  
Section 15: Regulations - Inventories information was added.  
Section 15: Seveso Substance Text information was added.  
Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material.

information was modified.

Section 2: No PBT/vPvB information available warning information was added.

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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