

Safety Data Sheet

Copyright,2020, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document group:	33-4643-4	Version number:	3.01
Revision date:	03/04/2020	Supersedes date:	16/10/2019
Transportation version	number: 1.00 (27/01/2017)		

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

Address:3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.Telephone:+44 (0)1344 858 000E Mail:tox.uk@mmm.comWebsite:www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

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 1,2-benzisothiazol-3(2H)-one	2634-33-5	701-048-1 220-120-9	< 0.15 < 0.1
HAZARD STATEMENTS: H317	May cause an allergic skin reaction.		
H412	Harmful to aquatic life with long lasting effects		
PRECAUTIONARY STATEM	ENTS		
General: P102	Keep out of reach of children.		
Prevention: P280E	Wear protective gloves.		
Response: P333 + P313	If skin irritation or rash occurs: Get medical a	dvice/attention.	
Disposal:			
P501	Dispose of contents/container in accordance wir regulations.	th applicable local/region	nal/national/international
SUPPLEMENTAL INFORMA	ΓΙΟΝ:		
Supplemental Hazard Statemen EUH066	ts: Repeated exposure may cause skin dryness or c	racking.	
Notes on labelling H304 is not required on the label of	due to the product's viscosity		
2.3. Other hazards			
None known.			

SECTION 3: Composition/information on ingredients Ingredient CAS Nbr EC No. REACH % by Wt Classification

			Registration No.		
Non hazardous ingredients	Mixture			60 - 100	Substance not classified as hazardous
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics		926-141-6	01- 2119456620- 43	7 - 13	Asp. Tox. 1, H304; EUH066
Aluminium oxide	1344-28-1	215-691-6		5 - 10	Substance with an occupational exposure limit
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics		923-037-2		5 10	Aquatic Chronic 2, H411 Flam. Liq. 3, H226; Asp. Tox. 1, H304; EUH066
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics		918-167-1		1 5	Flam. Liq. 3, H226; Aquatic Chronic 4, H413 Asp. Tox. 1, H304; EUH066
Glycerin	56-81-5	200-289-5		1 - 5	Substance with an occupational exposure limit
White Mineral Oil (Petroleum)	8042-47-5	232-455-8		< 1	Asp. Tox. 1, H304
morpholine	110-91-8	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		701-048-1		< 0.15	Skin Sens. 1B, H317
1,2-benzisothiazol-3(2H)-one	2634-33-5	220-120-9		< 0.1	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Skin Sens. 1, H317; Aquatic Acute 1, H400,M=10

Note: Any entry in the EC# 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

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.

Skin contact

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

Eye contact

No need for first aid is anticipated.

If swallowed

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

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

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

Substance	Condition
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.

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
morpholine	110-91-8	UK HSC	TWA: 36 mg/m ³ (10 ppm); STEL: 72 mg/m ³ (20 ppm)	SKIN
Aluminium oxide	1344-28-1	UK HSC	TWA(as inhalable dust):10 mg/m ³ ;TWA(as respirable dust):4 mg/m ³	
Glycerin UK HSC : UK Health and Safety Commis TWA: Time-Weighted-Average STEL: Short Term Exposure Limit CEIL: Ceiling	56-81-5 sion	UK HSC	TWA(as mist):10 mg/m3	

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 UK HSC

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

Appearance	
Physical state	Liquid.
Colour	Colourless
Specific Physical Form:	Liquid.
Odor	Mild Odor
Odour threshold	No data available.
рН	7.9 - 8.4
Boiling point/boiling range	No data available.
Melting point	No data available.
Flammability (solid, gas)	Not applicable.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	Flash point > 93 °C (200 °F) [<i>Test Method</i> :Closed Cup]
Autoignition temperature	No data available.
Flammable Limits(LEL)	No data available.
Flammable Limits(UEL)	No data available.
Vapour pressure	No data available.
Relative density	1.035 - 1.045 [<i>Ref Std</i> :WATER=1]
Water solubility	No data available.
Solubility- non-water	No data available.
Partition coefficient: n-octanol/water	No data available.
Evaporation rate	No data available.
Vapour density	No data available.
Decomposition temperature	No data available.
Viscosity	10,000 - 20,000 mPa-s
Density	1.035 - 1.045 g/ml

9.2. Other information EU Volatile Organic Compounds Percent volatile

No data available. 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

Substance None known. **Condition**

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 3M assessments.

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

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%	Inhalation-	Professio	LC50 estimated to be 20 - 50 mg/l

aromatics	Vapour	nal judgeme nt	
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	Professio nal judgeme nt	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	Professio nal judgeme nt	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
Glycerin	Dermal	Rabbit	LD50 estimated to be > 5,000 mg/kg
Glycerin	Ingestion	Rat	LD50 > 5,000 mg/kg
White Mineral Oil (Petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
White Mineral Oil (Petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg
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
Glycerin	Rabbit	No significant irritation
White Mineral Oil (Petroleum)	Rabbit	No significant irritation
Alkyloammonium Salt	Rabbit	No significant irritation
morpholine	official	Corrosive
	classificat	
	ion	
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
Glycerin	Rabbit	No significant irritation
White Mineral Oil (Petroleum)	Rabbit	Mild irritant

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	Not classified
	pig	
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Guinea	Not classified
	pig	
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Guinea	Not classified
	pig	
Glycerin	Guinea	Not classified
	pig	
White Mineral Oil (Petroleum)	Guinea	Not classified
	pig	
Alkyloammonium Salt	Mouse	Sensitising
morpholine	Guinea	Not classified
	pig	
1,2-benzisothiazol-3(2H)-one	Guinea	Sensitising
	pig	

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		
White Mineral Oil (Petroleum)	In Vitro	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%	Not	Not	Not carcinogenic
aromatics	specified.	available	
Aluminium oxide	Inhalation	Rat	Not carcinogenic
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	Not	Not	Not carcinogenic
	specified.	available	
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	Not	Not	Not carcinogenic
	specified.	available	
Glycerin	Ingestion	Mouse	Some positive data exist, but the data are not
			sufficient for classification
White Mineral Oil (Petroleum)	Dermal	Mouse	Not carcinogenic
White Mineral Oil (Petroleum)	Inhalation	Multiple	Not carcinogenic
		animal	
		species	
morpholine	Ingestion	Multiple	Not carcinogenic
		animal	
		species	

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
Glycerin	Ingestion	Not classified for female reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerin	Ingestion	Not classified for male reproduction	Rat	NOAEL 2,000 mg/kg/day	2 generation
Glycerin	Ingestion	Not classified for development	Rat	NOAEL 2,000 mg/kg/day	2 generation
White Mineral Oil (Petroleum)	Ingestion	Not classified for female reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White Mineral Oil (Petroleum)	Ingestion	Not classified for male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White Mineral Oil (Petroleum)	Ingestion	Not classified for development	Rat	NOAEL 4,350 mg/kg/day	during gestation
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 mg/kg/day	2 generation
1,2-benzisothiazol-3(2H)-one	Ingestion	Not classified for male reproduction	Rat	NOAEL 112 mg/kg/day	2 generation
1,2-benzisothiazol-3(2H)-one	Ingestion	Not classified for development	Rat	NOAEL 112 mg/kg/day	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name Route Target Organ(s) Value Species Test result Exposure Duration
--

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
Glycerin	Inhalation	respiratory system heart liver kidney and/or bladder	Not classified	Rat	NOAEL 3.91 mg/l	14 days
Glycerin	Ingestion	endocrine system hematopoietic system liver kidney and/or bladder	Not classified	Rat	NOAEL 10,000 mg/kg/day	2 years
White Mineral Oil (Petroleum)	Ingestion	hematopoietic system	Not classified	Rat	NOAEL 1,381 mg/kg/day	90 days
White Mineral Oil (Petroleum)	Ingestion	liver immune system	Not classified	Rat	NOAEL 1,336 mg/kg/day	90 days
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	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 system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 160 mg/kg/day	30 days
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
White Mineral Oil (Petroleum)	Aspiration hazard

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

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	Туре	Exposure	Test endpoint	Test result
Hydrocarbons, C11- C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Green Algae	Experimental	72 hours	Effect Level 50%	>1,000 mg/l
Hydrocarbons, C11- C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Water flea	Experimental	48 hours	Effect Level 50%	>1,000 mg/l
Hydrocarbons, C11- C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Rainbow trout	Experimental	96 hours	Lethal Level 50%	>1,000 mg/l
Hydrocarbons, C11- C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	926-141-6	Green Algae	Experimental	72 hours	No obs Effect Level	1,000 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	Fish	Experimental	96 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	Rainbow trout	Experimental	96 hours	Lethal Level 50%	>1,000 mg/l
Hydrocarbons, C10- C12, isoalkanes, <2% aromatics	923-037-2	Water flea	Experimental	48 hours	Effect Level 50%	>1,000 mg/l
Hydrocarbons, C10- C12, isoalkanes, <2%	923-037-2	Green Algae	Experimental	72 hours	Effect Level 50%	>1,000 mg/l

aromatics						
Hydrocarbons, C10- C12, isoalkanes, <2% aromatics	923-037-2	Green Algae	Experimental	72 hours	No obs Effect Level	1,000 mg/l
Hydrocarbons, C10- C12, isoalkanes, <2% aromatics	923-037-2	Water flea	Experimental	21 days	No obs Effect Level	1 mg/l
Glycerin	56-81-5	Water flea	Experimental	48 hours	LC50	1,955 mg/l
Glycerin	56-81-5	Rainbow trout	Experimental	96 hours	LC50	54,000 mg/l
Hydrocarbons, C11- C12, isoalkanes, <2% aromatics	918-167-1	Green Algae	Estimated	72 hours	Effect Level 50%	>1,000 mg/l
Hydrocarbons, C11- C12, isoalkanes, <2% aromatics	918-167-1	Water flea	Estimated	48 hours	Effect Level 50%	>1,000 mg/l
Hydrocarbons, C11- C12, isoalkanes, <2% aromatics	918-167-1	Rainbow trout	Estimated	96 hours	Lethal Level 50%	>1,000 mg/l
Hydrocarbons, C11- C12, isoalkanes, <2% aromatics	918-167-1	Green Algae	Estimated	72 hours	No obs Effect Level	1,000 mg/l
White Mineral Oil (Petroleum)	8042-47-5	Water flea	Estimated	48 hours	Effect Level 50%	>100 mg/l
White Mineral Oil (Petroleum)	8042-47-5	Bluegill	Experimental	96 hours	Lethal Level 50%	>100 mg/l
White Mineral Oil (Petroleum)	8042-47-5	Green algae	Estimated	72 hours	No obs Effect Level	>100 mg/l
White Mineral Oil (Petroleum)	8042-47-5	Water flea	Estimated	21 days	No obs Effect Level	>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	Effect Level 50%	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	Green Algae	Experimental	72 hours	Effect Level 10%	40 mg/l
morpholine	110-91-8	Fish other	Experimental	96 hours	LC50	100 mg/l
morpholine	110-91-8	Water flea	Experimental	48 hours	EC50	45 mg/l
morpholine	110-91-8	Rainbow trout	Experimental	96 hours	LC50	180 mg/l
morpholine	110-91-8	Green algae	Experimental	96 hours	EC50	28 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	Pacific oyster	Experimental	48 hours	EC50	0.062 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	Rainbow trout	Experimental	96 hours	LC50	1.6 mg/l
1,2-benzisothiazol- 3(2H)-one	2634-33-5	Green algae	Experimental	72 hours	EC50	0.11 mg/l
1,2-benzisothiazol- 3(2H)-one	2634-33-5	Green algae	Experimental	72 hours	NOEC	0.0403 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
----------	---------	-----------	----------	------------	-------------	----------

Hydrocarbons, C11-C14, n-	926-141-6	Experimental	28 days	BOD	69 %	OECD 301F - Manometric
alkanes, isoalkanes, cyclics, <2% aromatics		Biodegradation			BOD/ThBOD	respirometry
Aluminium oxide	1344-28-1	Data not availbl- insufficient			N/A	
Hydrocarbons, C10-C12, isoalkanes, <2% aromatics	923-037-2	Experimental Biodegradation	28 days	BOD	31.3 % BOD/ThBOD	OECD 301F - Manometric respirometry
Glycerin	56-81-5	Experimental Biodegradation	14 days	BOD	63 % BOD/ThBOD	OECD 301C - MITI test (I)
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	918-167-1	Estimated Biodegradation	28 days	BOD	31.3 % BOD/ThBOD	Other methods
White Mineral Oil (Petroleum)	8042-47-5	Experimental Biodegradation	28 days	CO2 evolution	0 % weight	OECD 301B - Modified sturm or CO2
Alkyloammonium Salt	701-048-1	Experimental Biodegradation	28 days	BOD	23 % BOD/ThBOD	OECD 301F - Manometric respirometry
morpholine	110-91-8	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	93 % weight	OECD 301E - Modified OECD Scre
1,2-benzisothiazol-3(2H)- one	2634-33-5	Experimental Biodegradation	28 days	BOD	0 % BOD/ThBOD	OECD 301C - MITI test (I)

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
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
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	Estimated: Octanol-water partition coefficient
Glycerin	56-81-5	Experimental Bioconcentration		Log Kow	-1.76	Other methods
Hydrocarbons, C11-C12, isoalkanes, <2% aromatics	918-167-1	Estimated BCF - Rainbow Tr		Bioaccumulation factor	2500	Other methods
White Mineral Oil (Petroleum)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Alkyloammonium Salt	701-048-1	Experimental Bioconcentration		Log Kow	< 1	Other methods
morpholine	110-91-8	Experimental BCF- Carp	42 days	Bioaccumulation factor	<2.8	OECD 305C-Bioaccum degree fish
1,2-benzisothiazol-3(2H)- one	2634-33-5	Experimental BCF - Bluegill	56 days	Bioaccumulation factor	6.62	

12.4. Mobility in soil

Please contact manufacturer for more details

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. 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

60-4550-8219-2

Not hazardous for transportation

SECTION 15: Regulatory information

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

Carcinogenicity			
<u>Ingredient</u>	<u>CAS Nbr</u>	Classification	Regulation
morpholine	110-91-8	Gr. 3: Not classifiable	International Agency
			for Research on Cancer

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.
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:

CLP: Ingredient table information was modified. Label: CLP Percent Unknown information was deleted. Section 3: Composition/Information of ingredients table information was modified. Section 4: First aid for inhalation information information was modified. Section 5: Hazardous combustion products table information was modified. Section 7: Precautions safe handling information information was modified. Section 8: Occupational exposure limit table information was modified. 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: Germ Cell Mutagenicity Table information was modified. Section 11: Health Effects - Inhalation 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: Persistence and Degradability information information was modified. Section 12:Bioccumulative potential information information was modified. Section 15: Carcinogenicity information information was modified. Section 15: Label remarks and EU Detergent 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.

Sectio 16: UK disclaimer information was deleted.

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.

3M United Kingdom MSDSs are available at www.3M.com/uk