



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, 09048, 09058, 09058E Finishing Material

Product Identification Numbers

UU-0031-3379-8

7100078919

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 858 000
E Mail: tox.uk@mmm.com
Website: 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 Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

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

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

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
Naphtha (petroleum), hydrotreated heavy	64742-48-9	265-150-3	7 - 13
Distillates (petroleum), acid-treated light	64742-14-9	265-114-7	5 - 10
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	225-208-0	< 0.5

HAZARD STATEMENTS:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

General:

P102 Keep out of reach of children.

Prevention:

P261A Avoid breathing vapours.
P271 Use only outdoors or in a well-ventilated area.
P280E Wear protective gloves.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.

Disposal:

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

10% of the mixture consists of components of unknown acute inhalation toxicity.
Contains 10% of components with unknown hazards to the aquatic environment.

Notes on labelling

H304 is not required on the label due to the product's viscosity
Nota P applied CASRN 64742-48-9 and 8052-41-3.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EC No.	REACH Registration No.	% by Wt	Classification
Non-Hazardous Ingredients	Mixture			40 - 70	Substance not classified as hazardous
Naphtha (petroleum), hydrotreated heavy	64742-48-9	265-150-3		7 - 13	Asp. Tox. 1, H304 - Nota P Aquatic Chronic 2, H411 Skin Irrit. 2, H315; STOT SE 3, H336
Distillates (petroleum), acid-treated light	64742-14-9	265-114-7		5 - 10	Nota N Asp. Tox. 1, H304; STOT SE 3, H336; EUH066
Aluminium Oxide (non-fibrous)	1344-28-1	215-691-6		5 - 10	Substance with a Community level exposure limit in the workplace
Glycerin	56-81-5	200-289-5		3 - 7	Substance with a Community level exposure limit in the workplace
White mineral oil (petroleum)	8042-47-5	232-455-8		0.1 - 1	Asp. Tox. 1, H304
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	225-208-0		< 0.5	Acute Tox. 4, H302; Skin Sens. 1, H317
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

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

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

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

If swallowed

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

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

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. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

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

Do not use in a confined area with minimal air exchange. Keep out of reach of children. 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.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed.

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 (non-fibrous)	1344-28-1	UK HSC	TWA(as inhalable dust):10 mg/m ³ ;TWA(as respirable dust):4 mg/m ³	
Glycerin	56-81-5	UK HSC	TWA(as mist):10 mg/m ³	

UK HSC : UK Health and Safety Commission

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.

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

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 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.
Appearance/Odour	Odourless white liquid
Odour threshold	<i>No data available.</i>
pH	8 - 8.3 Units not available or not applicable.
Boiling point/boiling range	>=93.3 °C
Melting point	<i>No data available.</i>
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> :Pensky-Martens Closed Cup]
Autoignition temperature	<i>No data available.</i>
Flammable Limits(LEL)	0.7 %
Flammable Limits(UEL)	7 %
Relative density	1 [<i>Ref Std</i> :WATER=1]
Water solubility	Slight (less than 10%)
Solubility- non-water	<i>No data available.</i>
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Evaporation rate	<i>No data available.</i>
Vapour density	4.5 [<i>Ref Std</i> :AIR=1]
Vapour density	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
Viscosity	12,000 - 18,000 mPa-s
Density	1 g/ml

9.2. Other information

EU Volatile Organic Compounds	<i>No data available.</i>
Molecular weight	<i>No data available.</i>
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 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

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

Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye contact

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. 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.

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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
Naphtha (petroleum), hydrotreated heavy	Inhalation-Vapour		LC50 estimated to be 20 - 50 mg/l
Naphtha (petroleum), hydrotreated heavy	Dermal	Rabbit	LD50 > 3,000 mg/kg
Naphtha (petroleum), hydrotreated heavy	Ingestion	Rat	LD50 > 5,000 mg/kg
Distillates (petroleum), acid-treated light	Dermal	Rabbit	LD50 > 2,000 mg/kg
Distillates (petroleum), acid-treated light	Ingestion	Rat	LD50 > 5,000 mg/kg
Aluminium Oxide (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminium Oxide (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminium Oxide (non-fibrous)	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
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	Dermal		estimated to be > 5,000 mg/kg
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	Inhalation-Dust/Mist		estimated to be > 12.5 mg/l
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	Ingestion		estimated to be 300 - 2,000 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

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Naphtha (petroleum), hydrotreated heavy	Rabbit	Irritant
Distillates (petroleum), acid-treated light	Professional judgement	Mild irritant
Aluminium Oxide (non-fibrous)	Rabbit	No significant irritation
Glycerin	Rabbit	No significant irritation
White mineral oil (petroleum)	Rabbit	No significant irritation
Morpholine	official classification	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Naphtha (petroleum), hydrotreated heavy	Rabbit	No significant irritation
Distillates (petroleum), acid-treated light	Professional judgement	Mild irritant
Aluminium Oxide (non-fibrous)	Rabbit	No significant irritation
Glycerin	Rabbit	No significant irritation

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White mineral oil (petroleum)	Rabbit	Mild irritant
Morpholine	Rabbit	Corrosive

Skin Sensitisation

Name	Species	Value
Naphtha (petroleum), hydrotreated heavy	Guinea pig	Not classified
Distillates (petroleum), acid-treated light	Guinea pig	Not classified
Glycerin	Guinea pig	Not classified
White mineral oil (petroleum)	Guinea pig	Not classified
Morpholine	Guinea pig	Not classified

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
Naphtha (petroleum), hydrotreated heavy	In vivo	Not mutagenic
Naphtha (petroleum), hydrotreated heavy	In Vitro	Some positive data exist, but the data are not sufficient for classification
Distillates (petroleum), acid-treated light	In Vitro	Not mutagenic
Aluminium Oxide (non-fibrous)	In Vitro	Not mutagenic
White mineral oil (petroleum)	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

Carcinogenicity

Name	Route	Species	Value
Naphtha (petroleum), hydrotreated heavy	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Naphtha (petroleum), hydrotreated heavy	Inhalation	Human and animal	Some positive data exist, but the data are not sufficient for classification
Distillates (petroleum), acid-treated light	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Aluminium Oxide (non-fibrous)	Inhalation	Rat	Not carcinogenic
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 animal species	Not carcinogenic
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
Naphtha (petroleum), hydrotreated heavy	Inhalation	Not classified for development	Rat	NOAEL 2.4 mg/l	during organogenesis
Glycerin	Ingestion	Not classified for female reproduction	Rat	NOAEL	2 generation

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				2,000 mg/kg/day	
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

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Naphtha (petroleum), hydrotreated heavy	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Naphtha (petroleum), hydrotreated heavy	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Naphtha (petroleum), hydrotreated heavy	Inhalation	nervous system	Not classified	Dog	NOAEL 6.5 mg/l	4 hours
Naphtha (petroleum), hydrotreated heavy	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Distillates (petroleum), acid-treated light	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Distillates (petroleum), acid-treated light	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
Distillates (petroleum), acid-treated light	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Professional judgement	NOAEL Not available	
Morpholine	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Naphtha (petroleum), hydrotreated heavy	Inhalation	nervous system	Not classified	Rat	LOAEL 4.6 mg/l	6 months
Naphtha (petroleum), hydrotreated heavy	Inhalation	kidney and/or bladder	Not classified	Rat	LOAEL 1.9 mg/l	13 weeks
Naphtha (petroleum), hydrotreated heavy	Inhalation	respiratory system	Not classified	Multiple animal species	NOAEL 0.6 mg/l	90 days
Naphtha (petroleum), hydrotreated heavy	Inhalation	bone, teeth, nails, and/or hair blood liver muscles	Not classified	Rat	NOAEL 5.6 mg/l	12 weeks
Naphtha (petroleum), hydrotreated heavy	Inhalation	heart	Not classified	Multiple animal species	NOAEL 1.3 mg/l	90 days
Aluminium Oxide (non-	Inhalation	pneumoconiosis	Some positive data exist, but the	Human	NOAEL Not	occupational

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fibrous)			data are not sufficient for classification		available	exposure
Aluminium Oxide (non-fibrous)	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
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 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

Aspiration Hazard

Name	Value
Naphtha (petroleum), hydrotreated heavy	Aspiration hazard
Distillates (petroleum), acid-treated light	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.

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Material	CAS Nbr	Organism	Type	Exposure	Test endpoint	Test result
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Water flea	Estimated	48 hours	Effect Level 50%	4.5 mg/l
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Green Algae	Estimated	72 hours	Effect Level 50%	3.1 mg/l
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Fathead minnow	Estimated	96 hours	Lethal Level 50%	8.2 mg/l
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Green Algae	Estimated	72 hours	No obs Effect Level	0.5 mg/l
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Water flea	Estimated	21 days	No obs Effect Level	2.6 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Water flea	Experimental	48 hours	LC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1		Experimental	96 hours	LC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	EC50	>100 mg/l
Aluminium Oxide (non-fibrous)	1344-28-1	Green algae	Experimental	72 hours	NOEC	>100 mg/l
Distillates (petroleum), acid-treated light	64742-14-9		Insufficient to classify			
Distillates (petroleum), acid-treated light	64742-14-9		Data not available or insufficient for classification			
Glycerin	56-81-5	Rainbow trout	Experimental	96 hours	LC50	54,000 mg/l
Glycerin	56-81-5	Water flea	Experimental	48 hours	LC50	1,955 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
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	Water flea	Experimental	48 hours	EC50	11.9 mg/l
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	Zebra Fish	Experimental	96 hours	LC50	16.07 mg/l
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	Green algae	Experimental	72 hours	EC50	6.66 mg/l
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	Green algae	Experimental	72 hours	NOEC	1.56 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	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	Water flea	Experimental	21 days	NOEC	5 mg/l
Morpholine	110-91-8	Green algae	Experimental	96 hours	NOEC	10 mg/l

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Naphtha (petroleum),	64742-48-9	Estimated	28 days	BOD	10 %	OECD 301D - Closed bottle

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hydrotreated heavy		Biodegradation			BOD/ThBOD	test
Aluminium Oxide (non-fibrous)	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), acid-treated light	64742-14-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerin	56-81-5	Experimental Biodegradation	14 days	BOD	63 % BOD/ThBOD	OECD 301C - MITI test (I)
White mineral oil (petroleum)	8042-47-5	Experimental Biodegradation	28 days	CO2 evolution	0 % weight	OECD 301B - Modified sturm or CO2
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	Experimental Biodegradation	14 days	BOD	92 % BOD/ThBOD	OECD 301C - MITI test (I)
Morpholine	110-91-8	Experimental Biodegradation	28 days	Dissolv. Organic Carbon Deplet	93 % weight	OECD 301E - Modified OECD Scre

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Naphtha (petroleum), hydrotreated heavy	64742-48-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Aluminium Oxide (non-fibrous)	1344-28-1	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Distillates (petroleum), acid-treated light	64742-14-9	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Glycerin	56-81-5	Experimental Bioconcentration		Log Kow	-1.76	Other methods
White mineral oil (petroleum)	8042-47-5	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
2,2',2''-(Hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4	Experimental Bioconcentration		Log Kow	-2	Other methods
Morpholine	110-91-8	Experimental BCF-Carp	42 days	Bioaccumulation factor	<2.8	OECD 305C-Bioaccum degree fish

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

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.

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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

UU-0031-3379-8

Not hazardous for transportation

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 material are in compliance with the provisions of the Korea Chemical Control Act. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Japan Chemical Substance Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory.

15.2. Chemical Safety Assessment

Not applicable

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.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Revision information:

Section 1: Product identification numbers information was modified.
Section 01: SAP Material Numbers information was added.
CLP: Ingredient table information was modified.
Label: CLP Classification information was modified.
Label: CLP Environmental Hazard Statements information was added.
Label: CLP Percent Unknown information was modified.
Label: CLP Precautionary - Disposal information was added.
Label: CLP Precautionary - General information was modified.
Label: CLP Precautionary - Prevention information was modified.
Section 3: Composition/ Information of ingredients table information was added.
Section 3: Composition/ Information of ingredients table information was deleted.
Section 5: Fire - Advice for fire fighters information information was modified.
Section 7: Precautions safe handling information information was modified.
Section 8: glove data value information was modified.
Section 8: Occupational exposure limit table 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: pH information information was added.
Section 9: Property description for optional properties information was modified.
Section 9: Solubility as text (non-water) information was added.
Section 9: Solubility in water text information was added.
Section 9: Vapor density text information was added.
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: 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: Biocumulative potential information information was modified.
Section 13: Standard Phrase Category Waste GHS information was modified.
Section 15: Regulations - Inventories information was modified.
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.

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