



Safety Data Sheet

Copyright, 2021, 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:	31-2250-4	Version number:	4.05
Revision date:	28/06/2021	Supersedes date:	24/08/2020

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™ Graffiti Remover 1500

Product Identification Numbers

FZ-0100-1400-4 FZ-0100-1401-2

7000082039 7000082040

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

Identified uses

Graffiti removal

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number

Emergency medical information: 8am-10pm (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland. Telephone Number: +353 (0)1 809 2166

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

The health and environmental classifications of this material have been derived using the calculation method, except in cases where test data are available or the physical form impacts classification. Classification(s) based on test data or physical form are noted below, if applicable.

CLASSIFICATION:

Acute Toxicity, Category 4 - Acute Tox. 4; H332
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319

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
benzyl alcohol	100-51-6	202-859-9	15 - 40

HAZARD STATEMENTS:

H332	Harmful if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

PRECAUTIONARY STATEMENTS

Prevention:

P261B Avoid breathing dust.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

10% of the mixture consists of components of unknown acute oral toxicity.

56% of the mixture consists of components of unknown acute inhalation toxicity.

Notes on labelling

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

Ingredients required per 648/2004 (not required on industrial label): <5%: Non-ionic surfactant. Contains: Benzyl alcohol.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Ingredient	Identifier(s)	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-(2-Ethoxyethoxy)ethanol	(CAS-No.) 111-90-0 (EC-No.) 203-919-7	15 - 40	Substance not classified as hazardous
benzyl alcohol	(CAS-No.) 100-51-6 (EC-No.) 202-859-9	15 - 40	Acute Tox. 4, H332 Acute Tox. 4, H302
(2-Methoxymethylethoxy)propanol	(CAS-No.) 34590-94-8 (EC-No.) 252-104-2	15 - 40	Substance with a Union workplace exposure limit
Fatty acids, C16-18 and C18-unsaturated, methyl esters	(CAS-No.) 67762-38-3 (EC-No.) 267-015-4	5 - 10	Substance not classified as hazardous
3-butoxypropan-2-ol	(CAS-No.) 5131-66-8 (EC-No.) 225-878-4	1 - 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Alcohols, C6-12, ethoxylated	(CAS-No.) 68439-45-2	0 - 1	Acute Tox. 4, H312

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

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

Eye contact

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

If swallowed

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

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

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 carbon dioxide or dry chemical extinguisher to extinguish.

5.2. Special hazards arising from the substance or mixture

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

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During combustion.
Carbon dioxide.	During combustion.
Toxic vapour, gas, particulate.	During combustion.

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire extinguishing foam that is resistant to polar solvents. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a 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

For industrial/occupational use only. Not for consumer sale or use. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. 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. Avoid release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

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

7.3. Specific end use(s)

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

personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

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

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
(2-Methoxymethylethoxy)propanol	34590-94-8	UK HSC	TWA:308 mg/m ³ (50 ppm)	SKIN

Methoxymethylethoxy)propanol

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.

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:

Indirect vented goggles.

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.

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

Material	Thickness (mm)	Breakthrough Time
Neoprene.	No data available	No data available
Nitrile rubber.	No data available	No data available

Applicable Norms/Standards

Use gloves tested to EN 374

Respiratory protection

In case of inadequate ventilation wear 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.
Colour	Green
Odor	Mild Odor
Odour threshold	<i>No data available.</i>
Melting point/freezing point	<i>Not applicable.</i>
Boiling point/boiling range	≥ 150 °C
Flammability (solid, gas)	Not applicable.
Flammable Limits(LEL)	<i>No data available.</i>
Flammable Limits(UEL)	<i>No data available.</i>
Flash point	90 - 100 °C [<i>Test Method: Closed Cup</i>]
Autoignition temperature	<i>No data available.</i>
Decomposition temperature	<i>No data available.</i>
pH	
Kinematic Viscosity	<i>No data available.</i>
Water solubility	<i>No data available.</i>
Solubility- non-water	<i>No data available.</i>
Partition coefficient: n-octanol/water	<i>No data available.</i>
Vapour pressure	<i>No data available.</i>
Density	0.965 - 0.98 g/ml [<i>@ 20 °C</i>]
Relative density	0.965 - 0.98 [<i>@ 20 °C</i>] [<i>Ref Std: WATER=1</i>]
Relative Vapor Density	<i>No data available.</i>

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds	868 - 931 g/l
Evaporation rate	<i>No data available.</i>
Percent volatile	<i>No data available.</i>

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

Heat.
Sparks and/or flames.

10.5 Incompatible materials

Strong oxidising agents.
Strong acids.
Drugs, medicines and/or food supplies.

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

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

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

Eye contact

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

Ingestion

May be harmful if swallowed.

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause additional health effects (see below).

Additional Health Effects:

Single exposure may cause target organ effects:

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

Toxicological Data

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Inhalation-Dust/Mist(4 hr)		No data available; calculated ATE >12.5 mg/l
Overall product	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg
2-(2-Ethoxyethoxy)ethanol	Dermal	Rabbit	LD50 9,143 mg/kg
2-(2-Ethoxyethoxy)ethanol	Ingestion	Rat	LD50 5,400 mg/kg
(2-Methoxymethylethoxy)propanol	Dermal	Rabbit	LD50 > 19,000 mg/kg
(2-Methoxymethylethoxy)propanol	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 50 mg/l
(2-Methoxymethylethoxy)propanol	Ingestion	Rat	LD50 5,180 mg/kg
benzyl alcohol	Inhalation-Dust/Mist (4 hours)	Rat	LC50 8.8 mg/l
benzyl alcohol	Ingestion	Rat	LD50 1,230 mg/kg
3-butoxypropan-2-ol	Dermal	Rat	LD50 > 2,000 mg/kg
3-butoxypropan-2-ol	Inhalation-Vapour	Rat	LC50 > 8.5 mg/l
3-butoxypropan-2-ol	Ingestion	Rat	LD50 2,124 mg/kg
Alcohols, C6-12, ethoxylated	Dermal	Rabbit	LD50 1,500 mg/kg
Alcohols, C6-12, ethoxylated	Ingestion	Rat	LD50 5,100 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
2-(2-Ethoxyethoxy)ethanol	Rabbit	No significant irritation
(2-Methoxymethylethoxy)propanol	Human and animal	No significant irritation
benzyl alcohol	Multiple animal species	Mild irritant
3-butoxypropan-2-ol	Rabbit	Mild irritant

Serious Eye Damage/Irritation

Name	Species	Value
2-(2-Ethoxyethoxy)ethanol	Rabbit	Moderate irritant
(2-Methoxymethylethoxy)propanol	Rabbit	Mild irritant
benzyl alcohol	Rabbit	Severe irritant
3-butoxypropan-2-ol	Rabbit	Severe irritant

Skin Sensitisation

Name	Species	Value
2-(2-Ethoxyethoxy)ethanol	Human	Not classified
(2-Methoxymethylethoxy)propanol	Human	Not classified
benzyl alcohol	Human and animal	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
------	-------	-------

2-(2-Ethoxyethoxy)ethanol	In Vitro	Not mutagenic
2-(2-Ethoxyethoxy)ethanol	In vivo	Not mutagenic
(2-Methoxymethylethoxy)propanol	In Vitro	Not mutagenic
benzyl alcohol	In vivo	Not mutagenic
benzyl alcohol	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
benzyl alcohol	Ingestion	Multiple animal species	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
2-(2-Ethoxyethoxy)ethanol	Dermal	Not classified for development	Rat	NOAEL 5,500 mg/kg/day	during organogenesis
2-(2-Ethoxyethoxy)ethanol	Ingestion	Not classified for development	Mouse	NOAEL 5,500 mg/kg/day	during organogenesis
2-(2-Ethoxyethoxy)ethanol	Inhalation	Not classified for development	Rat	NOAEL 0.6 mg/l	during organogenesis
2-(2-Ethoxyethoxy)ethanol	Ingestion	Not classified for male reproduction	Rat	NOAEL 2,200 mg/kg/day	2 generation
(2-Methoxymethylethoxy)propanol	Inhalation	Not classified for development	Multiple animal species	NOAEL 1.82 mg/l	during organogenesis
benzyl alcohol	Ingestion	Not classified for development	Mouse	NOAEL 550 mg/kg/day	during organogenesis

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
2-(2-Ethoxyethoxy)ethanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
(2-Methoxymethylethoxy)propanol	Dermal	central nervous system depression	Not classified	Rabbit	NOAEL 2,850 mg/kg	
(2-Methoxymethylethoxy)propanol	Inhalation	central nervous system depression	Not classified	Rat	LOAEL 3.07 mg/l	7 hours
(2-Methoxymethylethoxy)propanol	Ingestion	central nervous system depression	Not classified	Rat	LOAEL 5,000 mg/kg	
benzyl alcohol	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	
benzyl alcohol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		NOAEL Not available	
benzyl alcohol	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

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

2-(2-Ethoxyethoxy)ethanol	Dermal	kidney and/or bladder	Not classified	Rabbit	NOAEL 1,000 mg/kg/day	12 weeks
2-(2-Ethoxyethoxy)ethanol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification	Pig	NOAEL 167 mg/kg/day	90 days
2-(2-Ethoxyethoxy)ethanol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 2,700 mg/kg/day	90 days
2-(2-Ethoxyethoxy)ethanol	Ingestion	endocrine system	Not classified	Rat	NOAEL 2,500 mg/kg/day	90 days
2-(2-Ethoxyethoxy)ethanol	Ingestion	heart hematopoietic system nervous system	Not classified	Mouse	NOAEL 8,100 mg/kg/day	90 days
(2-Methoxymethylethoxy)propanol	Dermal	kidney and/or bladder heart endocrine system hematopoietic system liver respiratory system	Not classified	Rabbit	NOAEL 9,500 mg/kg/day	90 days
(2-Methoxymethylethoxy)propanol	Inhalation	heart hematopoietic system liver immune system nervous system eyes kidney and/or bladder	Not classified	Rat	NOAEL 1.21 mg/l	90 days
(2-Methoxymethylethoxy)propanol	Ingestion	liver heart endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system nervous system kidney and/or bladder respiratory system	Not classified	Rat	NOAEL 1,000 mg/kg/day	28 days
benzyl alcohol	Ingestion	endocrine system muscles kidney and/or bladder	Not classified	Rat	NOAEL 400 mg/kg/day	13 weeks
benzyl alcohol	Ingestion	nervous system respiratory system	Not classified	Mouse	NOAEL 645 mg/kg/day	8 days

Aspiration Hazard

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

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

11.2. Information on other hazards

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

SECTION 12: Ecological information

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

12.1. Toxicity

No product test data available.

Material	CAS #	Organism	Type	Exposure	Test endpoint	Test result
(2-Methoxymethylethoxy)propanol	34590-94-8	Bacteria	Experimental	18 hours	EC10	4,168 mg/l
(2-Methoxymethylethoxy)propanol	34590-94-8	Fathead minnow	Experimental	96 hours	LC50	>10,000 mg/l
(2-Methoxymethylethoxy)propanol	34590-94-8	Green Algae	Experimental	72 hours	EC50	>969 mg/l
(2-Methoxymethylethoxy)propanol	34590-94-8	Water flea	Experimental	48 hours	LC50	1,919 mg/l
(2-Methoxymethylethoxy)propanol	34590-94-8	Green Algae	Experimental	72 hours	EC10	133 mg/l
benzyl alcohol	100-51-6	Activated sludge	Experimental	3 hours	EC50	1,385 mg/l
benzyl alcohol	100-51-6	Fathead minnow	Experimental	96 hours	LC50	460 mg/l
benzyl alcohol	100-51-6	Green Algae	Experimental	72 hours	EC50	770 mg/l
benzyl alcohol	100-51-6	Water flea	Experimental	48 hours	EC50	230 mg/l
benzyl alcohol	100-51-6	Green Algae	Experimental	72 hours	NOEC	310 mg/l
benzyl alcohol	100-51-6	Water flea	Experimental	21 days	NOEC	51 mg/l
2-(2-Ethoxyethoxy)ethanol	111-90-0	Green algae	Estimated	96 hours	EC50	>100 mg/l
2-(2-Ethoxyethoxy)ethanol	111-90-0	Bacteria	Experimental	16 hours	EC10	4,000 mg/l
2-(2-Ethoxyethoxy)ethanol	111-90-0	Channel Catfish	Experimental	96 hours	LC50	6,010 mg/l
2-(2-Ethoxyethoxy)ethanol	111-90-0	Water flea	Experimental	48 hours	LC50	1,982 mg/l
2-(2-Ethoxyethoxy)ethanol	111-90-0	Green algae	Estimated	96 hours	NOEC	100 mg/l
3-butoxypropan-2-ol	5131-66-8	Green Algae	Experimental	96 hours	EC50	>1,000 mg/l
3-butoxypropan-2-ol	5131-66-8	Guppy	Experimental	96 hours	LC50	>560 mg/l
3-butoxypropan-2-ol	5131-66-8	Water flea	Experimental	48 hours	EC50	>1,000 mg/l
3-butoxypropan-2-ol	5131-66-8	Green Algae	Experimental	96 hours	NOEC	560 mg/l
Fatty acids, C16-18 and C18-unsaturated, methyl esters	67762-38-3	Golden Orfe	Experimental	48 hours	LC50	>100 mg/l
Fatty acids, C16-18 and C18-unsaturated, methyl esters	67762-38-3	Green Algae	Experimental	72 hours	EC50	>100 mg/l
Fatty acids, C16-18 and C18-unsaturated, methyl esters	67762-38-3	Water flea	Experimental	48 hours	EC50	>100 mg/l
Alcohols, C6-12, ethoxylated	68439-45-2		Data not available or insufficient for classification			N/A

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
(2-Methoxymethylethoxy)prop	34590-94-8	Experimental Biodegradation	28 days	BOD	75 % BOD/ThBOD	OECD 301F - Manometric respirometry

anol						
benzyl alcohol	100-51-6	Experimental Biodegradation	14 days	BOD	94 % BOD/ThBOD	OECD 301C - MITI test (I)
2-(2-Ethoxyethoxy)ethanol	111-90-0	Experimental Biodegradation	16 days	CO2 evolution	100 % weight	OECD 301B - Modified sturm or CO2
3-butoxypropan-2-ol	5131-66-8	Experimental Biodegradation	28 days	BOD	89 % BOD/ThBOD	OECD 301C - MITI test (I)
Fatty acids, C16-18 and C18-unsaturated, methyl esters	67762-38-3	Experimental Biodegradation	28 days	BOD	87 % weight	
Alcohols, C6-12, ethoxylated	68439-45-2	Estimated Biodegradation	28 days	CO2 evolution	85 % weight	OECD 301B - Modified sturm or CO2

12.3 : Bioaccumulative potential

Material	Cas No.	Test type	Duration	Study Type	Test result	Protocol
(2-Methoxymethylethoxy)propanol	34590-94-8	Experimental Bioconcentration		Log Kow	0.0061	Non-standard method
benzyl alcohol	100-51-6	Experimental Bioconcentration		Log Kow	1.10	Non-standard method
2-(2-Ethoxyethoxy)ethanol	111-90-0	Experimental Bioconcentration		Log Kow	-0.54	Non-standard method
3-butoxypropan-2-ol	5131-66-8	Experimental Bioconcentration		Log Kow	1.2	Non-standard method
Fatty acids, C16-18 and C18-unsaturated, methyl esters	67762-38-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Alcohols, C6-12, ethoxylated	68439-45-2	Estimated BCF-Carp	72 hours	Bioaccumulation factor	310	Non-standard method

12.4. Mobility in soil

No test data available.

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.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

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

complied with and always use a licensed waste contractor.

EU waste code (product as sold)

070604* Other organic solvents, washing liquids and mother liquors

SECTION 14: Transportation information

Not hazardous for transportation.

	Ground Transport (ADR)	Air Transport (IATA)	Marine Transport (IMDG)
14.1 UN number	No data available.	No data available.	No data available.
14.2 UN proper shipping name	No data available.	No data available.	No data available.
14.3 Transport hazard class(es)	No data available.	No data available.	No data available.
14.4 Packing group	No data available.	No data available.	No data available.
14.5 Environmental hazards	No data available.	No data available.	No data available.
14.6 Special precautions for user	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.	Please refer to the other sections of the SDS for further information.
14.7 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code	No data available.	No data available.	No data available.
Control Temperature	No data available.	No data available.	No data available.
Emergency Temperature	No data available.	No data available.	No data available.
ADR Tunnel Code	No data available.	Not applicable.	No data available.
ADR Classification Code	No data available.	No data available.	No data available.
ADR Transport Category	No data available.	No data available.	No data available.
ADR Multiplier	No data available.	No data available.	No data available.

IMDG Segregation Code	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

Global inventory status

Contact 3M for more 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.

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this substance/mixture in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information

List of relevant H statements

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

Revision information:

EU Section 09: pH information information was added.
 Section 1: Emergency telephone information was modified.
 Label: CLP Classification information was modified.
 Section 03: Composition table % Column heading information was added.
 Section 3: Composition/ Information of ingredients table information was modified.
 Section 03: Substance not applicable information was added.
 Section 04: Information on toxicological effects information was modified.
 Section 8: Personal Protection - Respiratory Information 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: Vapour pressure value information was modified.
 Section 9: Viscosity information information was deleted.
 Section 11: Classification disclaimer information was modified.
 Section 11: No endocrine disruptor information available warning information was added.

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: No Data text for mobility in soil information was added.
Section 12: No endocrine disruptor information available warning information was added.
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 Multiplier – Main Heading information was added.
Section 14 Multiplier – Regulation Data 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 Category – Main Heading information was added.
Section 14 Transport Category – Regulation Data information was added.
Section 14 Transport in bulk – Regulation Data information was added.
Section 14 Transport in bulk according to Annex II of Marpol and the IBC Code – Main Heading information was added.
Section 14 Tunnel Code – Main Heading information was added.
Section 14 Tunnel Code – Regulation Data 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.

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 Ireland MSDSs are available at www.3M.com