

### **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™ Graffiti Remover 1500

### **Product Identification Numbers**

FZ-0100-1404-6 FZ-0100-1406-1

7000082043 7000082045

### 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 Belgium BVBA / SPRL, Canadastraat 11, B-2070 Zwijndrecht, Belgium

**Telephone:** +32 (0)3 250.75.11 ( Fax : +32 (0)3 219 64 42)

E Mail: E-mail: Tox.be@mmm.com
Website: http://www.mmm.com/be

### 1.4. Emergency telephone number

+32 (0)70 245 245 (Antipoison Centre Belgium)

### **SECTION 2: Hazard identification**

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

### **CLASSIFICATION:**

Acute Toxicity, Category 4 - Acute Tox. 4; H332 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

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.

H319 Causes serious eye irritation. H315 Causes skin irritation.

### PRECAUTIONARY STATEMENTS

#### **Prevention:**

P261E Avoid breathing vapour or spray.

**Response:** 

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P312 Call a POISON CENTRE or doctor/physician if you feel unwell.

56% of the mixture consists of components of unknown acute inhalation toxicity. Contains 11% of components with unknown hazards to the aquatic environment.

### 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**

| Ingredient                | CAS Nbr  |           | REACH<br>Registration<br>No. | % by Wt | Classification                         |
|---------------------------|----------|-----------|------------------------------|---------|--|
| 2-(2-Ethoxyethoxy)ethanol | 111-90-0 | 203-919-7 |                              |         | Substance not classified as hazardous  |
| Benzyl Alcohol            | 100-51-6 | 202-859-9 |                              | 15 - 40 | Acute Tox. 4, H332; Acute Tox. 4, H302 |

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| (2-Methoxymethylethoxy)propanol          | 34590-94-8 | 252-104-2 | 15 - | 40 | Substance with a                |
|--|------------|-----------|------|----|---------------------------------|
|  |            |           |      |    | Community level exposure        |
|  |            |           |      |    | limit in the workplace          |
| Fatty acids, C16-18 and C18-unsaturated, | 67762-38-3 | 267-015-4 | 5    | 10 | Substance not classified as     |
| methyl esters                            |            |           |      |    | hazardous                       |
| 1-butoxypropan-2-ol                      | 5131-66-8  | 225-878-4 | 1 -  | 10 | Skin Irrit. 2, H315; Eye Irrit. |
|  |            |           |      |    | 2, H319                         |
| Alcohols, C6-12, ethoxylated             | 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

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

None inherent in this product.

### **Hazardous Decomposition or By-Products**

Substance
Carbon monoxide.
Carbon dioxide.
Toxic vapour, gas, particulate.

### **Condition**

During combustion.
During combustion.
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.

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### **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. 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 or professional use only. 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- 34590-94-8 Belgium OELs TWA(8 hours):308 mg/m3(50 SKIN

Methoxymethylethoxy)propanol pp

Belgium OELs: Belgium. Exposure Limit Values.

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

### 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:

MaterialThickness (mm)Breakthrough TimeNeoprene.No data availableNo data availableNitrile rubber.No data availableNo 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.

Appearance/OdourGreen; mild odourOdour thresholdNo data available.pHNo data available.

Boiling point/boiling range>=150 °CMelting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classified

Oxidising properties Not classified

Flash point 90 - 100 °C [Test Method: Closed Cup]

Autoignition temperatureNo data available.Flammable Limits(LEL)No data available.Flammable Limits(UEL)No data available.

Vapour pressure 176 kPa

**Relative density** 0.965 - 0.98 [@ 20 °C ] [*Ref Std*: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.
No data available.
No data available.
No data available.

**Density** 0.965 - 0.98 g/ml [@ 20 °C ]

9.2. Other information

EU Volatile Organic Compounds

No data available.

No data available.

### **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

**Substance** Condition

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

### **SECTION 11: Toxicological information**

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

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                 | Inhalation-<br>Dust/Mist(4 |         | No data available; calculated ATE >12.5 mg/l         |
|                                 | hr)                        |         |  |
| Overall product                 | Ingestion                  |         | No data available; calculated ATE2,000 - 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-                | Rat     | LC50 > 50  mg/l                                      |
|                                 | Dust/Mist                  |         |  |
|                                 | (4 hours)                  |         |  |
| (2-Methoxymethylethoxy)propanol | Ingestion                  | Rat     | LD50 5,180 mg/kg                                     |
| Benzyl Alcohol                  | Inhalation-                | Rat     | LC50 8.8 mg/l  |
|                                 | Dust/Mist                  |         |  |
|                                 | (4 hours)                  |         |  |
| Benzyl Alcohol                  | Ingestion                  | Rat     | LD50 1,230 mg/kg                                     |
| 1-butoxypropan-2-ol             | Dermal                     | Rat     | LD50 > 2,000 mg/kg                                   |
| 1-butoxypropan-2-ol             | Inhalation-                | Rat     | LC50 > 8.5 mg/l                                      |
|                                 | Vapour                     |         |  |
| 1-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    | No significant irritation |
|                                 | and      |                           |
|                                 | animal   |                           |
| Benzyl Alcohol                  | Multiple | Mild irritant             |
|                                 | animal   |                           |
|                                 | species  |                           |
| 1-butoxypropan-2-ol             | Rabbit   | Mild irritant             |

Serious Eve Damage/Irritation

| Serious Lye Damage/III teation  |         |                   |
|---------------------------------|---------|-------------------|
| Name                            | Species | Value             |
| 2-(2-Ethoxyethoxy)ethanol       | Rabbit  | Moderate irritant |
| (2-Methoxymethylethoxy)propanol | Rabbit  | Mild irritant     |
| Benzyl Alcohol                  | Rabbit  | Severe irritant   |
| 1-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   | Not classified |
|                                 | and     |                |
|                                 | animal  |                |

### **Respiratory Sensitisation**

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

**Germ Cell Mutagenicity** 

| Germ Cen Mudugementy            |          |  |
|---------------------------------|----------|--|
| 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 | Not carcinogenic |  |
|                |           | animal   |                  |  |
|                |           | species  |                  |  |

### **Reproductive Toxicity**

Reproductive and/or Developmental Effects

| Name                      | Route      | Value                                | Species | Test result                 | Exposure<br>Duration    |
|---------------------------|------------|--------------------------------------|---------|-----------------------------|-------------------------|
| 2-(2-Ethoxyethoxy)ethanol | Dermal     | Not classified for development       | Rat     | NOAEL<br>5,500<br>mg/kg/day | during<br>organogenesis |
| 2-(2-Ethoxyethoxy)ethanol | Ingestion  | Not classified for development       | Mouse   | NOAEL<br>5,500<br>mg/kg/day | during<br>organogenesis |
| 2-(2-Ethoxyethoxy)ethanol | Inhalation | Not classified for development       | Rat     | NOAEL 0.6<br>mg/l           | during organogenesis    |
| 2-(2-Ethoxyethoxy)ethanol | Ingestion  | Not classified for male reproduction | Rat     | NOAEL<br>2,200<br>mg/kg/day | 2 generation            |

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| (2-Methoxymethylethoxy)propanol | Inhalation | Not classified for development | Multiple | NOAEL 1.82 | during        |
|---------------------------------|------------|--------------------------------|----------|------------|---------------|
|                                 |            |                                | animal   | mg/l       | organogenesis |
|                                 |            |                                | species  |            |               |
| Benzyl Alcohol                  | Ingestion  | Not classified for development | Mouse    | NOAEL 550  | during        |
|                                 |            |                                |          | mg/kg/day  | organogenesis |

### Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

| Name                                    | Route      | Target Organ(s)                      | Value  | Species | Test result            | Exposure<br>Duration |
|---|------------|--------------------------------------|--|---------|------------------------|----------------------|
| 2-(2-Ethoxyethoxy)ethanol               | Inhalation | respiratory irritation               | Some positive data exist, but the data are not sufficient for classification |         | NOAEL Not<br>available |                      |
| (2-<br>Methoxymethylethoxy)pro<br>panol | Dermal     | central nervous<br>system depression | Not classified   | Rabbit  | NOAEL<br>2,850 mg/kg   |                      |
| (2-<br>Methoxymethylethoxy)pro<br>panol | Inhalation | central nervous<br>system depression | Not classified   | Rat     | LOAEL 3.07<br>mg/l     | 7 hours              |
| (2-<br>Methoxymethylethoxy)pro<br>panol | Ingestion  | central nervous<br>system depression | Not classified   | Rat     | LOAEL<br>5,000 mg/kg   |                      |
| Benzyl Alcohol                          | Inhalation | central nervous<br>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<br>available |                      |
| Benzyl Alcohol                          | Ingestion  | central nervous<br>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<br>Duration |
|---|------------|---|--|---------|-----------------------------|----------------------|
| 2-(2-Ethoxyethoxy)ethanol               | Dermal     | kidney and/or<br>bladder  | Not classified   | Rabbit  | NOAEL<br>1,000<br>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<br>mg/kg/day      | 90 days              |
| 2-(2-Ethoxyethoxy)ethanol               | Ingestion  | kidney and/or<br>bladder  | Some positive data exist, but the data are not sufficient for classification | Mouse   | NOAEL<br>2,700<br>mg/kg/day | 90 days              |
| 2-(2-Ethoxyethoxy)ethanol               | Ingestion  | endocrine system  | Not classified   | Rat     | NOAEL<br>2,500<br>mg/kg/day | 90 days              |
| 2-(2-Ethoxyethoxy)ethanol               | Ingestion  | heart  <br>hematopoietic<br>system   nervous<br>system  | Not classified   | Mouse   | NOAEL<br>8,100<br>mg/kg/day | 90 days              |
| (2-<br>Methoxymethylethoxy)pro<br>panol | Dermal     | kidney and/or<br>bladder   heart  <br>endocrine system  <br>hematopoietic<br>system   liver  <br>respiratory system | Not classified   | Rabbit  | NOAEL<br>9,500<br>mg/kg/day | 90 days              |
| (2-<br>Methoxymethylethoxy)pro<br>panol | Inhalation | heart   hematopoietic system   liver   immune system   nervous system   eyes   kidney and/or bladder                | Not classified   | Rat     | NOAEL 1.21<br>mg/l          | 90 days              |
| (2-<br>Methoxymethylethoxy)pro<br>panol | Ingestion  | liver   heart  <br>endocrine system  <br>bone, teeth, nails,<br>and/or hair   | Not classified   | Rat     | NOAEL<br>1,000<br>mg/kg/day | 28 days              |

|                |           | hematopoietic<br>system   immune<br>system   nervous<br>system   kidney<br>and/or bladder  <br>respiratory system |                |       |                        |          |
|----------------|-----------|---|----------------|-------|------------------------|----------|
| Benzyl Alcohol | Ingestion | endocrine system  <br>muscles   kidney<br>and/or bladder  | Not classified | Rat   | NOAEL 400<br>mg/kg/day | 13 weeks |
| Benzyl Alcohol | Ingestion | nervous system  <br>respiratory system  | Not classified | Mouse | NOAEL 645<br>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.

### **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 Nbr    | Organism        | Type         | Exposure | Test endpoint               | Test result  |
|---|------------|-----------------|--------------|----------|-----------------------------|--------------|
| (2-<br>Methoxymethylethoxy)<br>propanol | 34590-94-8 | Water flea      | Experimental | 48 hours | EC50                        | 1,919 mg/l   |
| (2-<br>Methoxymethylethoxy)<br>propanol | 34590-94-8 | Fathead minnow  | Experimental | 96 hours | LC50                        | >10,000 mg/l |
| (2-<br>Methoxymethylethoxy)<br>propanol | 34590-94-8 | Green Algae     | Experimental | 72 hours | EC50                        | >969 mg/l    |
| (2-<br>Methoxymethylethoxy)<br>propanol | 34590-94-8 | Green Algae     | Experimental | 72 hours | Effect<br>Concentration 10% | 133 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   | Fathead minnow  | Experimental | 96 hours | LC50                        | 460 mg/l     |
| Benzyl Alcohol                          | 100-51-6   | Water flea      | Experimental | 21 days  | NOEC                        | 51 mg/l      |
| Benzyl Alcohol                          | 100-51-6   | Green Algae     | Experimental | 72 hours | NOEC                        | 310 mg/l     |
| 2-(2-<br>Ethoxyethoxy)ethanol           | 111-90-0   | Channel Catfish | Experimental | 96 hours | LC50                        | 6,010 mg/l   |
| 2-(2-<br>Ethoxyethoxy)ethanol           | 111-90-0   | Water flea      | Experimental | 48 hours | LC50                        | 1,982 mg/l   |
| 2-(2-<br>Ethoxyethoxy)ethanol           | 111-90-0   | Green algae     | Estimated    | 96 hours | EC50                        | >100 mg/l    |
| 2-(2-<br>Ethoxyethoxy)ethanol           | 111-90-0   | Green algae     | Estimated    | 96 hours | NOEC                        | 100 mg/l     |
| 1-butoxypropan-2-ol                     | 5131-66-8  | Water flea      | Experimental | 48 hours | EC50                        | >1,000 mg/l  |

| 1-butoxypropan-2-ol                                    | 5131-66-8  | Green Algae | Experimental  | 96 hours | EC50 | >1,000 mg/l |
|--|------------|-------------|---|----------|------|-------------|
| 1-butoxypropan-2-ol                                    | 5131-66-8  | Guppy       | Experimental  | 96 hours | LC50 | >560 mg/l   |
| 1-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 | Green Algae | Experimental  | 72 hours | EC50 | >100 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 | Water flea  | Experimental  | 48 hours | EC50 | >100 mg/l   |
| Alcohols, C6-12, ethoxylated                           | 68439-45-2 |             | Data not available or insufficient for classification |          |      |             |

### 12.2. Persistence and degradability

| Material   | CAS Nbr    | Test type                      | Duration | Study Type    | Test result       | Protocol                             |
|--|------------|--------------------------------|----------|---------------|-------------------|--------------------------------------|
| (2-<br>Methoxymethylethoxy)prop<br>anol                | 34590-94-8 | Experimental<br>Biodegradation | 28 days  | BOD           | 75 % weight       | OECD 301F - Manometric respirometry  |
| Benzyl Alcohol   | 100-51-6   | Experimental<br>Biodegradation | 14 days  | BOD           | 94 % weight       | OECD 301C - MITI test (I)            |
| 2-(2-Ethoxyethoxy)ethanol                              | 111-90-0   | Experimental<br>Biodegradation | 16 days  | CO2 evolution | 100 % weight      | OECD 301B - Modified<br>sturm or CO2 |
| 1-butoxypropan-2-ol                                    | 5131-66-8  | Experimental<br>Biodegradation | 28 days  | BOD           | 89 %<br>BOD/ThBOD | OECD 301C - MITI test (I)            |
| Fatty acids, C16-18 and C18-unsaturated, methyl esters | 67762-38-3 | Experimental<br>Biodegradation | 28 days  | BOD           | 87 % weight       |                                      |
| Alcohols, C6-12, ethoxylated                           | 68439-45-2 | Estimated<br>Biodegradation    | 28 days  | CO2 evolution | 85 % weight       | OECD 301B - Modified<br>sturm or CO2 |

### 12.3: Bioaccumulative potential

| Material   | CAS Nbr    | Test type   | Duration | Study Type             | Test result | Protocol      |
|--|------------|---|----------|------------------------|-------------|---------------|
| (2-<br>Methoxymethylethoxy)pro<br>panol                | 34590-94-8 | Experimental Bioconcentration                         |          | Log Kow                | 0.0061      | Other methods |
| Benzyl Alcohol   | 100-51-6   | Experimental Bioconcentration                         |          | Log Kow                | 1.10        | Other methods |
| 2-(2-Ethoxyethoxy)ethanol                              | 111-90-0   | Experimental Bioconcentration                         |          | Log Kow                | -0.54       | Other methods |
| 1-butoxypropan-2-ol                                    | 5131-66-8  | Experimental Bioconcentration                         |          | Log Kow                | 1.2         | Other methods |
| 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-<br>Carp                                | 72 hours | Bioaccumulation factor | 310         | Other methods |

### 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.

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**

FZ-0100-1404-6, FZ-0100-1406-1

Not hazardous for transportation

### **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

Not applicable

### **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:**

CLP: Ingredient table information was modified.

Label: CLP Precautionary - Response information was modified.

Section 01: SAP Material Numbers information was added.

- Section 5: Fire Extinguishing media information information was modified.
- Section 11: Acute Toxicity table information was modified.
- Section 11: Reproductive Toxicity 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 13: Standard Phrase Category Waste GHS information was modified.
- Section 15: Regulations Inventories information was modified.
- Section 3: Composition/Information of ingredients table information was added.
- Section 3: Composition/Information of ingredients table information was deleted.
- Section 3: Reference to section 15 for Nota info information was deleted.
- Section 5: Fire Advice for fire fighters information information was modified.
- Section 5: Fire Special hazards information information was modified.
- Section 6: Accidental release personal information information was modified.
- Section 7: Conditions safe storage information was modified.
- Section 7: Precautions safe handling information information was modified.
- Section 8: Occupational exposure limit table information was modified.
- Section 9: Property description for optional properties information was added.
- Section 9: Property description for optional properties 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.

3M Belgium MSDSs are available at http://www.mmm.com/be