# Safety Data Sheet



| | | | |
|---|---|---|---|
| **Document group:** | 35-1592-1 | **Version number:** | 2.02 |
| **Revision date:** | 11/10/2018 | **Supersedes date:** | 10/09/2018 |

**Transportation version number:** 1.00 (28/09/2016)

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(TM) Scotch-Weld(TM) Low Odor Acrylic Adhesive DP8805NS Green, Part A

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

**Identified uses**
Adhesive

**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 Sensitization, Category 1B - Skin Sens. 1B; H317
Hazardous to the Aquatic Environment (Chronic), Category 2 - Aquatic Chronic 2; H411

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) |GHS09 (Environment) |

**Pictograms**

**Ingredients:**

| Ingredient | CAS Nbr | EC No. | % by Wt |
|---|---|---|---|
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | 13122-18-4 | 236-050-7 | 1 - 10 |

**HAZARD STATEMENTS:**

| | |
|---|---|
| H317 | May cause an allergic skin reaction. |
| H411 | Toxic to aquatic life with long lasting effects. |

**PRECAUTIONARY STATEMENTS**

**Prevention:**

| | |
|---|---|
| P280E | Wear protective gloves. |
| P273 | Avoid release to the environment. |

**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. |

**For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:**

**<=125 ml Hazard statements**

| | |
|---|---|
| H317 | May cause an allergic skin reaction. |

**<=125 ml Precautionary statements**

**Prevention:**

| | |
|---|---|
| P280E | Wear protective gloves. |

**Response:**

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

Contains 34% of components with unknown hazards to the aquatic environment.

**Notes on labelling**

The organic peroxide classification from CAS# 13122-18-4 does not apply to the material. The calculated available oxygen content is less than 1%.

**2.3. Other hazards**

None known.

## SECTION 3: Composition/information on ingredients

| Ingredient | CAS Nbr | EC No. | REACH Registration No. | % by Wt | Classification |
|---|---|---|---|---|---|
| Oxydipropyl dibenzoate | 27138-31-4 | 248-258-5 | | 50 - 80 | Aquatic Chronic 3, H412 |
| Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate | 25101-28-4 | | | 5 - 30 | Substance not classified as hazardous |
| Catalyst (NJTS Reg. No. 04499600-6922) | Trade Secret | | | 1 - 20 | Substance not classified as hazardous |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | 13122-18-4 | 236-050-7 | | 1 - 10 | Org. Perox. CD, H242; Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1<br>Skin Sens. 1B, H317 |

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**

| Substance | Condition |
|---|---|
| Hydrocarbons. | During combustion. |
| 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.

**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**
For industrial/occupational use only. Not for consumer sale or use. 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. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

**7.2. Conditions for safe storage including any incompatibilities**
Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

**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**
No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

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

**Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:
Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

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

*Applicable Norms/Standards*
Use a respirator conforming to EN 140 or EN 136: filter types A & P

## SECTION 9: Physical and chemical properties

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

| | |
|---|---|
| **Physical state** | Liquid. |
| **Specific Physical Form:** | Paste |
| **Appearance/Odour** | Blue, hydrocarbon odour |
| **Odour threshold** | *No data available.* |

| | |
|---|---|
| **pH** | *Not applicable.* |
| **Boiling point/boiling range** | >=65.6 ºC |
| **Melting point** | *Not applicable.* |
| **Flammability (solid, gas)** | Not applicable. |
| **Explosive properties** | Not classified |
| **Oxidising properties** | Not classified |
| **Flash point** | > 93.3 ºC [*Test Method:*Closed Cup] |
| **Autoignition temperature** | *No data available.* |
| **Flammable Limits(LEL)** | *No data available.* |
| **Flammable Limits(UEL)** | *No data available.* |
| **Vapour pressure** | *No data available.* |
| **Relative density** | 1.08 [*Ref Std:*WATER=1] |
| **Water solubility** | Nil |
| **Solubility- non-water** | *No data available.* |
| **Partition coefficient: n-octanol/water** | *No data available.* |
| **Evaporation rate** | *No data available.* |
| **Vapour density** | *No data available.* |
| **Decomposition temperature** | *No data available.* |
| **Viscosity** | 20,000 mPa-s |
| **Density** | 1.08 g/ml |

**9.2. Other information**

| | |
|---|---|
| **EU Volatile Organic Compounds** | *No data available.* |
| **Molecular weight** | *Not applicable.* |
| **Percent volatile** | *No data available.* |

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

**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**
Amines.
Strong acids.
Strong bases.
Strong oxidising agents.

**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:**

**Inhalation**
This product may have a characteristic odour; however, no adverse health effects are anticipated.

**Skin contact**
Contact with the skin during product use is not expected to result in significant irritation. 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**
May be harmful if swallowed.

**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 | Ingestion | | No data available; calculated ATE2,000 - 5,000 mg/kg |
| Oxydipropyl dibenzoate | Dermal | Rat | LD50 > 2,000 mg/kg |
| Oxydipropyl dibenzoate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 200 mg/l |
| Oxydipropyl dibenzoate | Ingestion | Rat | LD50 3,295 mg/kg |
| Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Catalyst (NJTS Reg. No. 04499600-6922) | Dermal | Professional judgement | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Catalyst (NJTS Reg. No. 04499600-6922) | Ingestion | Rat | LD50 > 2,000 mg/kg |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | Dermal | Rat | LD50 > 2,000 mg/kg |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.8 mg/l |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | Ingestion | Rat | LD50 12,905 mg/kg |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name | Species | Value |
|---|---|---|

| | | |
|---|---|---|
| Oxydipropyl dibenzoate | Rabbit | No significant irritation |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | Rabbit | No significant irritation |

**Serious Eye Damage/Irritation**

| Name | Species | Value |
|---|---|---|
| Oxydipropyl dibenzoate | Rabbit | No significant irritation |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | Rabbit | No significant irritation |

**Skin Sensitisation**

| Name | Species | Value |
|---|---|---|
| Oxydipropyl dibenzoate | Guinea pig | Not classified |
| Catalyst (NJTS Reg. No. 04499600-6922) | Mouse | Not classified |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | Guinea pig | Sensitising |

**Respiratory Sensitisation**

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

**Germ Cell Mutagenicity**

| Name | Route | Value |
|---|---|---|
| Oxydipropyl dibenzoate | In Vitro | Not mutagenic |
| Catalyst (NJTS Reg. No. 04499600-6922) | In Vitro | Not mutagenic |

**Carcinogenicity**

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

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

| Name | Route | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|
| Oxydipropyl dibenzoate | Ingestion | Not classified for female reproduction | Rat | NOAEL 500 mg/kg/day | 2 generation |
| Oxydipropyl dibenzoate | Ingestion | Not classified for male reproduction | Rat | NOAEL 400 mg/kg/day | 2 generation |
| Oxydipropyl dibenzoate | Ingestion | Not classified for development | Rat | NOAEL 1,000 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 |
|---|---|---|---|---|---|---|
| Catalyst (NJTS Reg. No. 04499600-6922) | Ingestion | nervous system | Not classified | Rat | NOAEL 2,000 mg/kg | |

**Specific Target Organ Toxicity - repeated exposure**

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|---|
| Oxydipropyl dibenzoate | Ingestion | hematopoietic system \| liver | Not classified | Rat | NOAEL 2,500 mg/kg/day | 90 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 # | Organism | Type | Exposure | Test endpoint | Test result |
|---|---|---|---|---|---|---|
| Oxydipropyl dibenzoate | 27138-31-4 | Fathead minnow | Experimental | 96 hours | LC50 | 3.7 mg/l |
| Oxydipropyl dibenzoate | 27138-31-4 | Green Algae | Experimental | 72 hours | Effect Level 50% | 4.9 mg/l |
| Oxydipropyl dibenzoate | 27138-31-4 | Water flea | Experimental | 48 hours | Effect Level 50% | 19.31 mg/l |
| Oxydipropyl dibenzoate | 27138-31-4 | Green Algae | Experimental | 72 hours | Effect Concentration 10% | 0.89 mg/l |
| Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate | 25101-28-4 | | Data not available or insufficient for classification | | | |
| Catalyst (NJTS Reg. No. 04499600-6922) | Trade Secret | | Data not available or insufficient for classification | | | |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | 13122-18-4 | Green Algae | Experimental | | EC50 | 0.51 mg/l |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | 13122-18-4 | Rainbow trout | Experimental | | LC50 | 7 mg/l |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | 13122-18-4 | Water flea | Experimental | | EC50 | >100 mg/l |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | 13122-18-4 | Green Algae | Experimental | | NOEC | 0.125 mg/l |

### 12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|---|---|---|---|---|---|
| Oxydipropyl dibenzoate | 27138-31-4 | Experimental Biodegradation | 28 days | CO2 evolution | 85 % weight | OECD 301B - Modified sturm or CO2 |
| Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate | 25101-28-4 | Data not availbl-insufficient | | | N/A | |
| Catalyst (NJTS Reg. No. 04499600-6922) | Trade Secret | Data not availbl-insufficient | | | N/A | |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | 13122-18-4 | Estimated Biodegradation | 28 | BOD | 14 % BOD/ThBOD | OECD 301C - MITI test (I) |

### 12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|---|---|---|---|---|---|---|
| Oxydipropyl dibenzoate | 27138-31-4 | Estimated Bioconcentration | | Bioaccumulation factor | 8 | Estimated: Bioconcentration factor |

| | | | | | | |
|---|---|---|---|---|---|---|
| Styrene, polymer with 1,3-Butadiene, butylacrylate and methyl methacrylate | 25101-28-4 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Catalyst (NJTS Reg. No. 04499600-6922) | Trade Secret | Estimated Bioconcentration | | Bioaccumulation factor | 4.8 | Estimated: Bioconcentration factor |
| Tert-butyl 3,5,5-trimethylperoxyhexanoate | 13122-18-4 | Estimated Bioconcentration | | Bioaccumulation factor | 363 | Estimated: Bioconcentration factor |

**12.4. Mobility in soil**
Please contact manufacturer for more details

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

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

**12.6. Other adverse effects**
No information available.

## SECTION 13: Disposal considerations

**13.1 Waste treatment methods**
Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product 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)**
08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances
20 01 27* Paint, inks, adhesives and resins containing dangerous substances

## SECTION 14: Transportation information

ADR/IATA/IMDG: Not restricted for transport.

## 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 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.

**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**

| | |
|---|---|
| H242 | Heating may cause a fire. |
| H317 | May cause an allergic skin reaction. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

**Revision information:**
Section 7: Precautions safe handling information information was modified.
Section 14: Transportation classification 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**

# Safety Data Sheet



| | | | |
|---|---|---|---|
| **Document group:** | 31-5464-8 | **Version number:** | 4.02 |
| **Revision date:** | 24/02/2017 | **Supersedes date:** | 21/02/2017 |

**Transportation version number:** 1.00 (28/01/2014)

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(TM) Scotch-Weld(TM) Low Odour Acrylic Adhesive DP8805NS, Green, Part B

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

**Identified uses**
Adhesive

**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:**
Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315
Skin Sensitization, Category 1 - Skin Sens. 1; H317
Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400
Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

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) |GHS09 (Environment) |

**Pictograms**

**Ingredients:**

| Ingredient | CAS Nbr | % by Wt |
|---|---|---|
| 2-Hydroxyethyl methacrylate | 868-77-9 | 10 - 30 |

**HAZARD STATEMENTS:**

| | |
|---|---|
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H410 | Very toxic to aquatic life with long lasting effects. |

**PRECAUTIONARY STATEMENTS**

**Prevention:**

| | |
|---|---|
| P280E | Wear protective gloves. |
| P273 | Avoid release to the environment. |

**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. |
| 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. |

**For containers not exceeding 125 ml the following Hazard and Precautionary statements may be used:**

**<=125 ml Hazard statements**

| | |
|---|---|
| H317 | May cause an allergic skin reaction. |

**<=125 ml Precautionary statements**

**Prevention:**

| | |
|---|---|
| P280E | Wear protective gloves. |

**Response:**

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

2% of the mixture consists of components of unknown acute oral toxicity.

Contains 7% of components with unknown hazards to the aquatic environment.

### 2.3. Other hazards

None known.

## SECTION 3: Composition/information on ingredients

| Ingredient | CAS Nbr | EC No. | REACH Registration No. | % by Wt | Classification |
|---|---|---|---|---|---|
| Tetrahydrofurfuryl methacrylate | 2455-24-5 | 219-529-5 | | 25 - 45 | Skin Irrit. 2, H315; Eye Irrit. 2, H319 |
| Fillers (NJTS Reg. No. 04499600-6923) | Trade Secret | | | 10 - 30 | Substance with a Community level exposure limit in the workplace |
| 2-Hydroxyethyl methacrylate | 868-77-9 | 212-782-2 | 01-2119490169-29 | 10 - 30 | Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 - Nota D |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | 7534-94-3 | 231-403-1 | | 1 - 20 | Aquatic Chronic 2, H411 |
| Acrylonitrile - butadiene polymer | 9003-18-3 | | | 1 - 20 | Substance not classified as hazardous |
| Phosphate Esters of PPG Methacrylate (NJTS Reg. No. 04499600-6924) | Trade Secret | | | 0.1 - 10 | Substance not classified as hazardous |
| Bisphenol A dimethacrylate, ethoxylated | 41637-38-1 | | | 0.1 - 10 | Aquatic Chronic 4, H413 |
| Silicon dioxide | Trade Secret | | | 1 - 5 | Substance with a Community level exposure limit in the workplace |
| Naphthenic acids, copper salts | 1338-02-9 | 215-657-0 | | < 0.1 | Flam. Liq. 3, H226; Acute Tox. 4, H302<br>Aquatic Acute 1, H400,M=1000<br>Aquatic Chronic 1, H410,M=1000 |

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**
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 fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

**5.2. Special hazards arising from the substance or mixture**
None inherent in this product.

**Hazardous Decomposition or By-Products**

| Substance | Condition |
|---|---|
| Carbon monoxide. | During combustion. |
| Carbon dioxide. | During combustion. |
| Oxides of nitrogen. | During combustion. |

**5.3. Advice for fire-fighters**
No special protective actions for fire-fighters are anticipated.

## 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**
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**
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. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.)

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

Store away from heat. Store away from acids. Store away from strong bases. Store away from oxidising agents. Store away from amines.

**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 |
|---|---|---|---|---|
| Fillers (NJTS Reg. No. 04499600-6923) | Trade Secret | UK HSC | TWA (as respirable dust): 2 mg/m³ | |
| Silicon dioxide | Trade Secret | UK HSC | TWA(as inhalable dust):6 mg/m3;TWA(as respirable dust):2.4 mg/m3 | |

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.

**Derived no effect level (DNEL)**

| Ingredient | Degradation Product | Population | Human exposure pattern | DNEL |
|---|---|---|---|---|
| 2-Hydroxyethyl methacrylate | | Worker | Dermal, Long-term exposure (8 hours), Systemic effects | 1.3 mg/kg bw/d |
| 2-Hydroxyethyl methacrylate | | Worker | Inhalation, Long-term exposure (8 hours), Systemic effects | 4.9 mg/m³ |

**Predicted no effect concentrations (PNEC)**

| Ingredient | Degradation Product | Compartment | PNEC |
|---|---|---|---|
| 2-Hydroxyethyl methacrylate | | Agricultural soil | 0.476 mg/kg d.w. |
| 2-Hydroxyethyl methacrylate | | Freshwater | 0.482 mg/l |
| 2-Hydroxyethyl methacrylate | | Freshwater sediments | 3.79 mg/kg d.w. |
| 2-Hydroxyethyl methacrylate | | Intermittent releases to water | 1 mg/l |
| 2-Hydroxyethyl methacrylate | | Marine water | 0.482 mg/l |
| 2-Hydroxyethyl methacrylate | | Marine water sediments | 3.79 mg/kg d.w. |
| 2-Hydroxyethyl methacrylate | | Sewage Treatment Plant | 10 mg/l |

**8.2. Exposure controls**

In addition, refer to the annex for more information.

**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.

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

| Material | Thickness (mm) | Breakthrough Time |
|---|---|---|
| Fluoroelastomer | No data available | No data available |

**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.

**8.2.3. Environmental exposure controls**
Refer to Annex

## SECTION 9: Physical and chemical properties

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

| | |
|---|---|
| **Physical state** | Liquid. |
| **Specific Physical Form:** | Paste |
| **Appearance/Odour** | White, acrylate odour |
| **Odour threshold** | *No data available.* |
| **pH** | *Not applicable.* |
| **Boiling point/boiling range** | >=37.8 ºC |
| **Melting point** | *Not applicable.* |
| **Flammability (solid, gas)** | Not applicable. |
| **Explosive properties** | Not classified |
| **Oxidising properties** | Not classified |

| | |
|---|---|
| **Flash point** | > 93.3 ºC [*Test Method:*Closed Cup] |
| **Autoignition temperature** | *No data available.* |
| **Flammable Limits(LEL)** | *No data available.* |
| **Flammable Limits(UEL)** | *No data available.* |
| **Vapour pressure** | *No data available.* |
| **Relative density** | 1.13 [*Ref Std:*WATER=1] |
| **Water solubility** | Nil |
| **Solubility- non-water** | *No data available.* |
| **Partition coefficient: n-octanol/water** | *No data available.* |
| **Evaporation rate** | *No data available.* |
| **Decomposition temperature** | *No data available.* |
| **Viscosity** | 100,000 - 125,000 mPa-s |
| **Density** | 1.13 g/ml |

**9.2. Other information**

| | |
|---|---|
| **Molecular weight** | *No data available.* |

## SECTION 10: Stability and reactivity

**10.1 Reactivity**
This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

**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**
Amines.
Strong acids.
Strong bases.
Strong oxidising agents.

**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:**

**Inhalation**
Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

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

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

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

**Acute Toxicity**

| Name | Route | Species | Value |
|---|---|---|---|
| Overall product | Dermal | | No data available; calculated ATE >5,000 mg/kg |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Tetrahydrofurfuryl methacrylate | Dermal | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Tetrahydrofurfuryl methacrylate | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg |
| 2-Hydroxyethyl methacrylate | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| 2-Hydroxyethyl methacrylate | Ingestion | Rat | LD50 5,564 mg/kg |
| Acrylonitrile - butadiene polymer | Dermal | Rabbit | LD50 > 15,000 mg/kg |
| Acrylonitrile - butadiene polymer | Ingestion | Rat | LD50 > 30,000 mg/kg |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | Dermal | Rabbit | LD50 > 3,000 mg/kg |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | Ingestion | Rat | LD50 > 2,000 mg/kg |
| Fillers (NJTS Reg. No. 04499600-6923) | Dermal | | LD50 estimated to be > 5,000 mg/kg |
| Fillers (NJTS Reg. No. 04499600-6923) | Ingestion | Human | LD50 > 15,000 mg/kg |
| Bisphenol A dimethacrylate, ethoxylated | Dermal | Professional judgement | LD50 estimated to be > 5,000 mg/kg |
| Bisphenol A dimethacrylate, ethoxylated | Ingestion | Rat | LD50 > 2,000 mg/kg |
| Silicon dioxide | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Silicon dioxide | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 0.691 mg/l |
| Silicon dioxide | Ingestion | Rat | LD50 > 5,110 mg/kg |
| Naphthenic acids, copper salts | Dermal | | estimated to be > 5,000 mg/kg |
| Naphthenic acids, copper salts | Inhalation-Dust/Mist | | estimated to be > 12.5 mg/l |
| Naphthenic acids, copper salts | Inhalation-Vapour | | estimated to be > 50 mg/l |
| Naphthenic acids, copper salts | Ingestion | | estimated to be 300 - 2,000 mg/kg |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name | Species | Value |
|---|---|---|
| Tetrahydrofurfuryl methacrylate | similar | Irritant |

| | | |
|---|---|---|
| | compounds | |
| 2-Hydroxyethyl methacrylate | Rabbit | Minimal irritation |
| Acrylonitrile - butadiene polymer | Professional judgement | No significant irritation |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | Rabbit | Mild irritant |
| Fillers (NJTS Reg. No. 04499600-6923) | Professional judgement | No significant irritation |
| Silicon dioxide | Rabbit | No significant irritation |

**Serious Eye Damage/Irritation**

| Name | Species | Value |
|---|---|---|
| Tetrahydrofurfuryl methacrylate | similar compounds | Severe irritant |
| 2-Hydroxyethyl methacrylate | Rabbit | Moderate irritant |
| Acrylonitrile - butadiene polymer | Professional judgement | No significant irritation |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | Rabbit | Mild irritant |
| Fillers (NJTS Reg. No. 04499600-6923) | Professional judgement | No significant irritation |
| Silicon dioxide | Rabbit | No significant irritation |

**Skin Sensitisation**

| Name | Species | Value |
|---|---|---|
| Tetrahydrofurfuryl methacrylate | Human | Some positive data exist, but the data are not sufficient for classification |
| 2-Hydroxyethyl methacrylate | Human and animal | Sensitising |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | Guinea pig | Not sensitising |
| Bisphenol A dimethacrylate, ethoxylated | Guinea pig | Not sensitising |
| Silicon dioxide | Human and animal | Not sensitising |

**Respiratory Sensitisation**

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

**Germ Cell Mutagenicity**

| Name | Route | Value |
|---|---|---|
| 2-Hydroxyethyl methacrylate | In vivo | Not mutagenic |
| 2-Hydroxyethyl methacrylate | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Bisphenol A dimethacrylate, ethoxylated | In Vitro | Not mutagenic |
| Silicon dioxide | In Vitro | Not mutagenic |

**Carcinogenicity**

| Name | Route | Species | Value |
|---|---|---|---|
| Fillers (NJTS Reg. No. 04499600-6923) | Inhalation | Multiple animal | Not carcinogenic |

| | | | |
|---|---|---|---|
| | | species | |
| Silicon dioxide | Not specified. | Mouse | Some positive data exist, but the data are not sufficient for classification |

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

| Name | Route | Value | Species | Test result | Exposure Duration |
|---|---|---|---|---|---|
| 2-Hydroxyethyl methacrylate | Ingestion | Not toxic to female reproduction | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| 2-Hydroxyethyl methacrylate | Ingestion | Not toxic to male reproduction | Rat | NOAEL 1,000 mg/kg/day | 49 days |
| 2-Hydroxyethyl methacrylate | Ingestion | Not toxic to development | Rat | NOAEL 1,000 mg/kg/day | premating & during gestation |
| Silicon dioxide | Ingestion | Not toxic to female reproduction | Rat | NOAEL 509 mg/kg/day | 1 generation |
| Silicon dioxide | Ingestion | Not toxic to male reproduction | Rat | NOAEL 497 mg/kg/day | 1 generation |
| Silicon dioxide | Ingestion | Not toxic to development | Rat | NOAEL 1,350 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 |
|---|---|---|---|---|---|---|
| Tetrahydrofurfuryl methacrylate | 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 |
|---|---|---|---|---|---|---|
| Fillers (NJTS Reg. No. 04499600-6923) | Inhalation | pneumoconiosis | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL NA | occupational exposure |
| Fillers (NJTS Reg. No. 04499600-6923) | Inhalation | pulmonary fibrosis | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL Not available | |
| Silicon dioxide | Inhalation | respiratory system \| silicosis | All data are negative | Human | NOAEL Not available | occupational exposure |

**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 |
|---|---|---|---|---|---|---|
| Bisphenol A dimethacrylate, ethoxylated | 41637-38-1 | | Data not available or insufficient for classification | | | |
| Silicon dioxide | Trade Secret | | Data not available or insufficient for classification | | | |
| Naphthenic acids, copper salts | 1338-02-9 | Water flea | Experimental | 48 hours | EC50 | 0.34 mg/l |
| Naphthenic acids, copper salts | 1338-02-9 | Fish | Experimental | 96 hours | LC50 | 0.00034 mg/l |
| Fillers (NJTS Reg. No. 04499600-6923) | Trade Secret | | Data not available or insufficient for classification | | | |
| Acrylonitrile - butadiene polymer | 9003-18-3 | | Data not available or insufficient for classification | | | |
| Tetrahydrofurfuryl methacrylate | 2455-24-5 | Fathead minnow | Experimental | 96 hours | LC50 | 34.7 mg/l |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | 7534-94-3 | Green Algae | Experimental | 96 hours | EC50 | 2.7 mg/l |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | 7534-94-3 | Water flea | Experimental | 48 hours | EC50 | 1.1 mg/l |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | 7534-94-3 | Zebra Fish | Experimental | 96 hours | LC50 | 1.8 mg/l |
| 2-Hydroxyethyl methacrylate | 868-77-9 | Water flea | Experimental | 48 hours | EC50 | 380 mg/l |
| 2-Hydroxyethyl methacrylate | 868-77-9 | Fathead minnow | Experimental | 96 hours | LC50 | 227 mg/l |
| 2-Hydroxyethyl methacrylate | 868-77-9 | Green Algae | Experimental | 72 hours | EC50 | 345 mg/l |
| 2-Hydroxyethyl methacrylate | 868-77-9 | Green Algae | Experimental | 72 hours | NOEC | 160 mg/l |
| 2-Hydroxyethyl methacrylate | 868-77-9 | Water flea | Experimental | 21 days | NOEC | 24.1 mg/l |

**12.2. Persistence and degradability**

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|---|---|---|---|---|---|
| 2-Hydroxyethyl methacrylate | 868-77-9 | Experimental Hydrolysis | | Hydrolytic half-life | 10.9 days (t 1/2) | Other methods |
| Fillers (NJTS Reg. No. 04499600-6923) | Trade Secret | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Acrylonitrile - butadiene polymer | 9003-18-3 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Silicon dioxide | Trade Secret | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Naphthenic acids, copper salts | 1338-02-9 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | 7534-94-3 | Experimental Biodegradation | 28 days | BOD | 26.8 % weight | OECD 301D - Closed bottle test |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | 7534-94-3 | Estimated Photolysis | | Photolytic half-life (in air) | 1.12 days (t 1/2) | Other methods |
| Tetrahydrofurfuryl methacrylate | 2455-24-5 | Estimated Biodegradation | 28 days | BOD | 85.9 % weight | Other methods |
| Bisphenol A dimethacrylate, ethoxylated | 41637-38-1 | Calculated Biodegradation | 28 days | BOD | 38 % weight | OECD 301C - MITI test (I) |
| 2-Hydroxyethyl methacrylate | 868-77-9 | Experimental Biodegradation | 14 days | BOD | 95 % weight | OECD 301C - MITI test (I) |

**12.3 : Bioaccumulative potential**

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|---|---|---|---|---|---|
| Acrylonitrile - butadiene polymer | 9003-18-3 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Silicon dioxide | Trade Secret | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Fillers (NJTS Reg. No. 04499600- | Trade Secret | Data not available or insufficient for | N/A | N/A | N/A | N/A |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6923) | | classification | | | | |
| 2-Hydroxyethyl methacrylate | 868-77-9 | Experimental Bioconcentration | | Log Kow | 0.47 | Other methods |
| Naphthenic acids, copper salts | 1338-02-9 | Experimental Bioconcentration | | Log Kow | 4.1 | Other methods |
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | 7534-94-3 | Estimated Bioconcentration | | Bioaccumulation factor | 37.4 | Other methods |
| Tetrahydrofurfuryl methacrylate | 2455-24-5 | Estimated Bioconcentration | | Log Kow | 1.80 | Other methods |
| Bisphenol A dimethacrylate, ethoxylated | 41637-38-1 | Calculated Bioconcentration | | Bioaccumulation factor | 6.7 | Estimated: Bioconcentration factor |

**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 completely cured (or polymerised) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product 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)**

| | |
|---|---|
| 08 04 09* | Waste adhesives and sealants containing organic solvents or other dangerous substances |
| 20 01 27* | Paint, inks, adhesives and resins containing dangerous substances |

## SECTION 14: Transportation information

ADR: UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (ISOBORNYL METHACRYLATE AND COPPER SALT); 9; III; (E); M6.
IMDG: UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (ISOBORNYL

METHACRYLATE AND COPPER SALT); Marine Pollutant (ISOBORNYL METHACRYLATE); 9; III; FA, SF.
IATA: UN3082; ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (ISOBORNYL METHACRYLATE AND COPPER SALT); 9; III.
Exemption: For vessels containing a net quantity of 5 l or a net mass of 5 kg or less per single or inner packaging , special provision 375 (ADR), exemption per 2.10.2.7 (IMDG) or special provision A197 (IATA) may be applied, if applicable

## 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. 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**
A chemical safety assessment has been carried out for the relevant substances in this material by the registrant in accordance with regulation REGULATION (EC) No 1907/2006

## SECTION 16: Other information

**List of relevant H statements**

| | |
|---|---|
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H413 | May cause long lasting harmful effects to aquatic life. |

**Revision information:**
No revision information

## Annex

| **1. Title** | |
|---|---|
| **Substance identification** | 2-Hydroxyethyl methacrylate;<br>EC No. 212-782-2;<br>CAS Nbr 868-77-9; |
| **Exposure Scenario Name** | Industrial Application of Adhesives and Sealants |
| **Identified uses** | PROC 05, ERC 05, SU 03 ;<br>PROC 13, ERC 05, SU 03 ; |
| **Processes, tasks and activities covered** | Manual application of product. Mixing operations (open systems). |
| **2. Operational conditions and risk management measures** | |
| **Operating Conditions** | **Physical state:**Liquid.<br>**General operating conditions:**<br>Duration of use: 8 hours/day;<br>Frequency of exposure at workplace [for one worker]: 5 days/week;<br>Indoor use; |

| | |
|---|---|
| **Risk management measures** | Under the operational conditions described above the following risk management measures apply:<br>**General risk management measures:**<br>**Human health:**<br>Goggles - Chemical resistant;<br>**Environmental:**<br>None needed; |
| **Waste management measures** | No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions: |
| **3. Prediction of exposure** | |
| **Prediction of exposure** | Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted. |

| **1. Title** | |
|---|---|
| **Substance identification** | 2-Hydroxyethyl methacrylate;<br>EC No. 212-782-2;<br>CAS Nbr 868-77-9; |
| **Exposure Scenario Name** | Professional Application of Adhesives and Sealants |
| **Identified uses** | PROC 05, ERC 08c, SU 22 ;<br>PROC 13, ERC 08c, SU 22 ; |
| **Processes, tasks and activities covered** | Manual application of product. Mixing operations (open systems). |
| **2. Operational conditions and risk management measures** | |
| **Operating Conditions** | **Physical state:**Liquid.<br>**General operating conditions:**<br>Duration of use: 15 min - 1 hour task;<br>Frequency of exposure at workplace [for one worker]: 5 days/week;<br>Indoor use;<br><br>**Task: PROC05**;<br>Indoors with good general ventilation; |
| **Risk management measures** | Under the operational conditions described above the following risk management measures apply:<br>**General risk management measures:**<br>**Human health:**<br>Local exhaust ventilation;<br>Protective Gloves - Chemical resistant;<br>**Environmental:**<br>None needed; |
| **Waste management measures** | No use-specific waste management measures are required for this product. Refer to Section 13 of main SDS for disposal instructions: |
| **3. Prediction of exposure** | |
| **Prediction of exposure** | Human and environmental exposures are not expected to exceed the DNELs and PNECs when the identified risk management measures are adopted. |

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.

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