



Safety Data Sheet

Copyright, 2024, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

| | | | |
|------------------------|------------|-------------------------|------------|
| Document group: | 07-0925-3 | Version number: | 23.00 |
| Revision date: | 01/02/2024 | Supersedes date: | 05/12/2023 |

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 Primer 94 (Ampoules)

Product Identification Numbers

70-0160-5484-6

7000050137

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

Identified uses

Industrial use.

1.3. Details of the supplier of the safety data sheet

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

1.4. Emergency telephone number

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

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

CLP REGULATION (EC) No 1272/2008

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

CLASSIFICATION:

Flammable Liquid, Category 2 - Flam. Liq. 2; H225

Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
 Skin Sensitization, Category 1 - Skin Sens. 1; H317
 Carcinogenicity, Category 1B - Carc. 1B; H350
 Specific Target Organ Toxicity-Repeated Exposure, Category 2 - STOT RE 2; H373
 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336
 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H335
 Aspiration Hazard, Category 1 - Asp. Tox. 1; H304
 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

DANGER.

Symbols

GHS02 (Flame) | GHS07 (Exclamation mark) | GHS08 (Health Hazard) | GHS09 (Environment) |

Pictograms



Ingredients:

| Ingredient | CAS Nbr | EC No. | % by Wt |
|---|-----------|-----------|---------|
| cyclohexane | 110-82-7 | 203-806-2 | 40 - 60 |
| xylene | 1330-20-7 | 215-535-7 | 15 - 50 |
| cumene | 98-82-8 | 202-704-5 | < 0.25 |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | 216-823-5 | < 0.5 |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | 3388-04-3 | 222-217-1 | < 1 |
| maleic anhydride | 108-31-6 | 203-571-6 | < 0.1 |

HAZARD STATEMENTS:

| | |
|------|---|
| H225 | Highly flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H317 | May cause an allergic skin reaction. |
| H350 | May cause cancer. |
| H336 | May cause drowsiness or dizziness. |
| H335 | May cause respiratory irritation. |
| H304 | May be fatal if swallowed and enters airways. |
| H373 | May cause damage to organs through prolonged or repeated exposure: nervous system sensory organs. |
| H410 | Very toxic to aquatic life with long lasting effects. |

PRECAUTIONARY STATEMENTS

Prevention:

P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280K Wear protective gloves and respiratory protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P331 Do NOT induce vomiting.

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.
H350 May cause cancer.
H304 May be fatal if swallowed and enters airways.

<=125 ml Precautionary statements**Prevention:**

P201 Obtain special instructions before use.
P280K Wear protective gloves and respiratory protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P331 Do NOT induce vomiting.

SUPPLEMENTAL INFORMATION:**Supplemental Precautionary Statements:**

Restricted to professional users.

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

2.3. Other hazards

None known.

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Ingredient | Identifier(s) | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|-------------|--|---------|--|
| cyclohexane | (CAS-No.) 110-82-7 (EC-No.) 203-806-2 (REACH-No.) 01-2119463273-41 | 40 - 60 | Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Acute 1, H400,M=1 |

| | | | |
|---|---|---------|---|
| | | | Aquatic Chronic 1, H410,M=1 |
| xylene | (CAS-No.) 1330-20-7 (EC-No.) 215-535-7 | 15 - 50 | Flam. Liq. 3, H226 Acute Tox. 4, H332 Acute Tox. 4, H312 Skin Irrit. 2, H315 Nota C Asp. Tox. 1, H304 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412 |
| cumene | (CAS-No.) 98-82-8 (EC-No.) 202-704-5 | < 0.25 | Flam. Liq. 3, H226 Asp. Tox. 1, H304 Carc. 1B, H350 STOT SE 3, H335 Aquatic Chronic 2, H411 |
| chlorobenzene | (CAS-No.) 108-90-7 (EC-No.) 203-628-5 | < 0.11 | Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Aquatic Chronic 2, H411 Aquatic Acute 1, H400,M=1 |
| ethanol | (CAS-No.) 64-17-5 (EC-No.) 200-578-6 (REACH-No.) 01-2119457610-43 | 5 - 10 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 |
| Acrylate Polymer | Trade Secret | < 5 | Substance not classified as hazardous |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | (CAS-No.) 1675-54-3 (EC-No.) 216-823-5 | < 0.5 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411 |
| methanol | (CAS-No.) 67-56-1 (EC-No.) 200-659-6 (REACH-No.) 01-2119433307-44 | < 0.5 | Flam. Liq. 2, H225 Acute Tox. 3, H331 Acute Tox. 3, H311 Acute Tox. 3, H301 STOT SE 1, H370 |
| 4-methylpentan-2-one | (CAS-No.) 108-10-1 (EC-No.) 203-550-1 | < 0.5 | Flam. Liq. 2, H225 Acute Tox. 4, H332(LC50 = 11 mg/l **ATE values per Annex VI**) Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H336 EUH066 |
| toluene | (CAS-No.) 108-88-3 (EC-No.) 203-625-9 | < 0.5 | Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Aquatic Chronic 3, H412 |
| ethyl acetate | (CAS-No.) 141-78-6 (EC-No.) 205-500-4 | 1 - 5 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 |
| 2,5-Furandione, reaction products with polypropylene, chlorinated | (CAS-No.) 68609-36-9 | < 2 | Substance not classified as hazardous |

| | | | |
|---|---|-------|--|
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | (CAS-No.) 3388-04-3 (EC-No.) 222-217-1 | < 1 | Aquatic Chronic 3, H412 Skin Sens. 1, H317 |
| maleic anhydride | (CAS-No.) 108-31-6 (EC-No.) 203-571-6 | < 0.1 | EUH071 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372 |

Please see section 16 for the full text of any H statements referred to in this section

Specific Concentration Limits

| Ingredient | Identifier(s) | Specific Concentration Limits |
|---|---|---|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | (CAS-No.) 1675-54-3 (EC-No.) 216-823-5 | (C >= 5%) Skin Irrit. 2, H315 (C >= 5%) Eye Irrit. 2, H319 |
| ethanol | (CAS-No.) 64-17-5 (EC-No.) 200-578-6 (REACH-No.) 01-2119457610-43 | (C >= 50%) Eye Irrit. 2, H319 |
| maleic anhydride | (CAS-No.) 108-31-6 (EC-No.) 203-571-6 | (C >= 0.001%) Skin Sens. 1A, H317 |
| methanol | (CAS-No.) 67-56-1 (EC-No.) 200-659-6 (REACH-No.) 01-2119433307-44 | (C >= 10%) STOT SE 1, H370 (3% <= C < 10%) STOT SE 2, H371 |

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 for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

If swallowed

Do not induce vomiting. Get immediate medical attention.

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

The most important symptoms and effects based on the CLP classification include:

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Irritation to the skin (localized redness, swelling, itching, and dryness). Allergic skin reaction (redness, swelling, blistering, and itching). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision). Aspiration pneumonitis (coughing, gasping, choking, burning of the mouth, and difficulty breathing). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness). Target organ effects. See Section 11 for additional details.

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 flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

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

Hazardous Decomposition or By-Products**Substance**

Aldehydes.
formaldehyde
Carbon monoxide
Carbon dioxide.
Hydrogen Chloride

Condition

During combustion.
During combustion.
During combustion.
During combustion.
During combustion.

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. 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 metal 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

Not intended for use as a medical device or drug. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe 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.) Wear low static or properly grounded shoes. Use personal protective equipment (eg. gloves, respirators...) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapour accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Protect from sunlight. 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 |
|----------------------|----------|--------------|---|----------------------|
| 4-methylpentan-2-one | 108-10-1 | Ireland OELs | TWA(8 hours):83 mg/m3(20 ppm);TWA(8 hours):20 ppm(83 mg/m3);STEL(15 minutes):208 mg/m3(50 ppm);STEL(15 minutes):50 ppm(208 mg/m3) | SKIN |
| maleic anhydride | 108-31-6 | Ireland OELs | TWA(inhalable fraction and vapour)(8 hours):0.01 ppm | |
| toluene | 108-88-3 | Ireland OELs | TWA(8 hours):192 mg/m3(50 ppm);TWA(8 hours):50 ppm(192 mg/m3);STEL(15 minutes):384 mg/m3(100 ppm);STEL(15 minutes):100 ppm(384 mg/m3) | SKIN |
| chlorobenzene | 108-90-7 | Ireland OELs | TWA(As monochlorobenzene)(8 hours):5 ppm(23 mg/m3);TWA(8 hours):23 mg/m3(5 ppm);STEL(As monochlorobenzene)(15 minutes):15 ppm(70 mg/m3);STEL(15 minutes):70 mg/m3(15 ppm) | as monochlorobenzene |

| | | | | |
|---------------|-----------|--------------|---|------|
| cyclohexane | 110-82-7 | Ireland OELs | TWA(8 hours):700 mg/m ³ (200 ppm);TWA(8 hours):200 ppm(700 mg/m ³) | |
| xylene | 1330-20-7 | Ireland OELs | TWA(8 hours):221 mg/m ³ (50 ppm);TWA(8 hours):50 ppm(221 mg/m ³);STEL(15 minutes):442 mg/m ³ (100 ppm);STEL(15 minutes):100 ppm(442 mg/m ³) | SKIN |
| ethyl acetate | 141-78-6 | Ireland OELs | TWA(8 hours):734 mg/m ³ (200 ppm);TWA(8 hours):200 ppm(734 mg/m ³);STEL(15 minutes):1468 mg/m ³ (400 ppm);STEL(15 minutes):400 ppm(1468 mg/m ³) | |
| ethanol | 64-17-5 | Ireland OELs | STEL(15 minutes):1000 ppm | |
| methanol | 67-56-1 | Ireland OELs | TWA(8 hours):260 mg/m ³ (200 ppm);TWA(8 hours):200 ppm(260 mg/m ³) | SKIN |
| cumene | 98-82-8 | Ireland OELs | TWA(8 hours):50 mg/m ³ (10 ppm);TWA(8 hours):10 ppm(50 mg/m ³);STEL(15 minutes):250 mg/m ³ (50 ppm);STEL(15 minutes):50 ppm(250 mg/m ³) | SKIN |

Ireland OELs : Ireland. OELs
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 |
|---|---------------------|------------|--|------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | | Worker | Dermal, Long-term exposure (8 hours), Systemic effects | 8.3 mg/kg bw/d |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | | Worker | Dermal, Short-term exposure, Systemic effects | 8.3 mg/kg bw/d |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | | Worker | Inhalation, Long-term exposure (8 hours), Systemic effects | 12.3 mg/m ³ |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | | Worker | Inhalation, Short-term exposure, Systemic effects | 12.3 mg/m ³ |
| cyclohexane | | Worker | Dermal, Long-term exposure (8 hours), Systemic effects | 2,016 mg/kg bw/d |
| cyclohexane | | Worker | Inhalation, Long-term exposure (8 hours), Local effects | 700 mg/m ³ |
| cyclohexane | | Worker | Inhalation, Long-term exposure (8 hours), | 700 mg/m ³ |

| | | | | |
|-------------|--|--------|--|-----------------------|
| | | | Systemic effects | |
| cyclohexane | | Worker | Inhalation, Short-term exposure, Local effects | 700 mg/m ³ |
| cyclohexane | | Worker | Inhalation, Short-term exposure, Systemic effects | 700 mg/m ³ |
| xylene | | Worker | Dermal, Long-term exposure (8 hours), Systemic effects | 180 mg/kg bw/d |
| xylene | | Worker | Inhalation, Long-term exposure (8 hours), Local effects | 77 mg/m ³ |
| xylene | | Worker | Inhalation, Long-term exposure (8 hours), Systemic effects | 77 mg/m ³ |
| xylene | | Worker | Inhalation, Short-term exposure, Local effects | 289 mg/m ³ |
| xylene | | Worker | Inhalation, Short-term exposure, Systemic effects | 289 mg/m ³ |
| ethanol | | Worker | Dermal, Long-term exposure (8 hours), Systemic effects | 343 mg/kg bw/d |
| ethanol | | Worker | Inhalation, Long-term exposure (8 hours), Systemic effects | 950 mg/m ³ |

Predicted no effect concentrations (PNEC)

| Ingredient | Degradation Product | Compartment | PNEC |
|---|---------------------|--------------------------------|------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | | Freshwater | 0.003 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | | Freshwater sediments | 0.5 mg/kg d.w. |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | | Intermittent releases to water | 0.013 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | | Marine water | 0.0003 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | | Marine water sediments | 0.5 mg/kg d.w. |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | | Sewage Treatment Plant | 10 mg/l |
| cyclohexane | | Freshwater | 0.207 mg/l |
| cyclohexane | | Freshwater sediments | 3.627 mg/kg d.w. |
| cyclohexane | | Intermittent releases to water | 0.207 mg/l |
| cyclohexane | | Marine water | 0.207 mg/l |
| xylene | | Agricultural soil | 2.31 mg/kg d.w. |

| | | | |
|---------|--|--|------------------|
| xylene | | Freshwater | 0.327 mg/l |
| xylene | | Freshwater sediments | 12.46 mg/kg d.w. |
| xylene | | Marine water | 0.327 mg/l |
| xylene | | Marine water sediments | 12.46 mg/kg d.w. |
| xylene | | Sewage Treatment Plant | 6.58 mg/l |
| ethanol | | Agricultural soil | 0.63 mg/kg d.w. |
| ethanol | | Concentration in marine fish for secondary poisoning | 380 mg/kg w.w. |
| ethanol | | Freshwater | 0.96 mg/l |
| ethanol | | Freshwater sediments | 3.6 mg/kg d.w. |
| ethanol | | Intermittent releases to water | 2.75 mg/l |
| ethanol | | Marine water | 0.79 mg/l |
| ethanol | | Marine water sediments | 2.9 mg/kg d.w. |
| ethanol | | Sewage Treatment Plant | 580 mg/l |

Recommended monitoring procedures: Information on recommended monitoring procedures can be obtained from Indust. Inspect./Ministry (IE)

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. Use explosion-proof ventilation 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.
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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended:

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

Applicable Norms/Standards

Use gloves tested to EN 374

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - polymer laminate

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapours and particulates

Half facepiece or full facepiece supplied-air respirator

Organic vapour respirators may have short service life.

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

Use a respirator conforming to EN 140 or EN 136: filter types A & P

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: | Liquid. |
| Colour | Amber |
| Odor | Solvent |
| Odour threshold | No data available. |
| Melting point/freezing point | Not applicable. |
| Boiling point/boiling range | 76.7 °C |
| Flammability (solid, gas) | Not applicable. |
| Flammable Limits(LEL) | 1 % |
| Flammable Limits(UEL) | 11 % |
| Flash point | -17.2 °C [Test Method:Closed Cup] |
| Autoignition temperature | No data available. |
| Decomposition temperature | No data available. |
| pH | substance/mixture is non-soluble (in water) |
| Kinematic Viscosity | 12.2 mm ² /sec |
| Water solubility | Negligible |
| Solubility- non-water | No data available. |
| Partition coefficient: n-octanol/water | No data available. |
| Vapour pressure | 9,065.9 Pa [@ 20 °C] |
| Density | 0.82 g/ml |
| Relative density | 0.82 [@ 25 °C] [Ref Std:WATER=1] |
| Relative Vapour Density | No data available. |

9.2. Other information

9.2.2 Other safety characteristics

| | |
|-------------------------------|--|
| EU Volatile Organic Compounds | No data available. |
| Evaporation rate | No data available. |
| Molecular weight | No data available. |
| Percent volatile | 95.3 - 97 % weight [Test Method:Estimated] |

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.

10.6 Hazardous decomposition products

| <u>Substance</u> | <u>Condition</u> |
|------------------|------------------|
| None known. | |

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

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

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

May be harmful if inhaled. 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

May be harmful in contact with skin. Mild Skin Irritation: Signs/symptoms may include localised redness, swelling, itching, and dryness. Allergic skin reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching. May cause additional health effects (see below).

Eye contact

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

Ingestion

Chemical (aspiration) pneumonitis: Signs/symptoms may include coughing, gasping, choking, burning of the mouth, difficulty breathing, bluish coloured skin (cyanosis), and may be fatal. 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:

Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Prolonged or repeated exposure may cause target organ effects:

Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Neurological effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and changes in blood pressure and heart rate.

Reproductive/Developmental Toxicity:

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Additional information:

This product contains ethanol. Alcoholic beverages and ethanol in alcoholic beverages have been classified by the International Agency for Research on Cancer as carcinogenic to humans. There are also data associating human consumption of alcoholic beverages with developmental toxicity and liver toxicity. Exposure to ethanol during the foreseeable use of this product is not expected to cause cancer, developmental toxicity, or liver toxicity.

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 >2,000 - =5,000 mg/kg |
| Overall product | Inhalation-Vapour(4 hr) | | No data available; calculated ATE >20 - =50 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| xylene | Dermal | Rabbit | LD50 > 4,200 mg/kg |
| xylene | Inhalation-Vapour (4 hours) | Rat | LC50 29 mg/l |
| xylene | Ingestion | Rat | LD50 3,523 mg/kg |
| cyclohexane | Dermal | Rat | LD50 > 2,000 mg/kg |
| cyclohexane | Inhalation-Vapour (4 hours) | Rat | LC50 > 32.9 mg/l |
| cyclohexane | Ingestion | Rat | LD50 6,200 mg/kg |
| ethanol | Dermal | Rabbit | LD50 > 15,800 mg/kg |
| ethanol | Inhalation-Vapour (4 hours) | Rat | LC50 124.7 mg/l |
| ethanol | Ingestion | Rat | LD50 17,800 mg/kg |
| ethyl acetate | Dermal | Rabbit | LD50 > 18,000 mg/kg |
| ethyl acetate | Inhalation-Vapour (4 hours) | Rat | LC50 70.5 mg/l |
| ethyl acetate | Ingestion | Rat | LD50 5,620 mg/kg |
| 2,5-Furandione, reaction products with polypropylene, | Dermal | Guinea | LD50 > 1,000 mg/kg |

3M Primer 94 (Ampoules)

| | | | |
|---|-----------------------------|--------|--|
| chlorinated | | pig | |
| 2,5-Furandione, reaction products with polypropylene, chlorinated | Ingestion | Rat | LD50 > 3,200 mg/kg |
| methanol | Dermal | | LD50 estimated to be 1,000 - 2,000 mg/kg |
| methanol | Inhalation-Vapour | | LC50 estimated to be 10 - 20 mg/l |
| methanol | Ingestion | | LD50 estimated to be 50 - 300 mg/kg |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | Dermal | Rabbit | LD50 6,700 mg/kg |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | Inhalation-Vapour (4 hours) | Rat | LC50 > 7 mg/l |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | Ingestion | Rat | LD50 13,100 mg/kg |
| bis-[4-(2,3-epoxypropoxy)phenyl]propane | Dermal | Rat | LD50 > 1,600 mg/kg |
| bis-[4-(2,3-epoxypropoxy)phenyl]propane | Ingestion | Rat | LD50 > 1,000 mg/kg |
| toluene | Dermal | Rat | LD50 12,000 mg/kg |
| toluene | Inhalation-Vapour (4 hours) | Rat | LC50 30 mg/l |
| toluene | Ingestion | Rat | LD50 5,550 mg/kg |
| 4-methylpentan-2-one | Dermal | Rabbit | LD50 > 16,000 mg/kg |
| 4-methylpentan-2-one | Inhalation-Vapour (4 hours) | Rat | LC50 11 mg/l |
| 4-methylpentan-2-one | Ingestion | Rat | LD50 3,038 mg/kg |
| cumene | Dermal | Rabbit | LD50 > 3,160 mg/kg |
| cumene | Inhalation-Vapour (4 hours) | Rat | LC50 39.4 mg/l |
| cumene | Ingestion | Rat | LD50 1,400 mg/kg |
| chlorobenzene | Dermal | Rabbit | LD50 2,212 mg/kg |
| chlorobenzene | Inhalation-Vapour (4 hours) | Rat | LC50 16.7 mg/l |
| chlorobenzene | Ingestion | Rat | LD50 1,419 mg/kg |
| maleic anhydride | Dermal | Rabbit | LD50 2,620 mg/kg |
| maleic anhydride | Ingestion | Rat | LD50 1,030 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|------------------|---------------------------|
| xylene | Rabbit | Mild irritant |
| cyclohexane | Rabbit | Mild irritant |
| ethanol | Rabbit | No significant irritation |
| ethyl acetate | Rabbit | Minimal irritation |
| 2,5-Furandione, reaction products with polypropylene, chlorinated | Guinea pig | No significant irritation |
| methanol | Rabbit | Mild irritant |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | Rabbit | Minimal irritation |
| bis-[4-(2,3-epoxypropoxy)phenyl]propane | Rabbit | Mild irritant |
| toluene | Rabbit | Irritant |
| 4-methylpentan-2-one | Rabbit | Mild irritant |
| cumene | Rabbit | Minimal irritation |
| chlorobenzene | Rabbit | Irritant |
| maleic anhydride | Human and animal | Corrosive |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-------------|---------|---------------|
| xylene | Rabbit | Mild irritant |
| cyclohexane | Rabbit | Mild irritant |

3M Primer 94 (Ampoules)

| | | |
|---|------------------------|---------------------------|
| ethanol | Rabbit | Severe irritant |
| ethyl acetate | Rabbit | Mild irritant |
| 2,5-Furandione, reaction products with polypropylene, chlorinated | Professional judgement | Mild irritant |
| methanol | Rabbit | Moderate irritant |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | Rabbit | No significant irritation |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Rabbit | Moderate irritant |
| toluene | Rabbit | Moderate irritant |
| 4-methylpentan-2-one | Rabbit | Mild irritant |
| cumene | Rabbit | Mild irritant |
| chlorobenzene | Rabbit | Mild irritant |
| maleic anhydride | Rabbit | Corrosive |

Skin Sensitisation

| Name | Species | Value |
|---|-------------------------|----------------|
| ethanol | Human | Not classified |
| ethyl acetate | Guinea pig | Not classified |
| methanol | Guinea pig | Not classified |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | similar compounds | Sensitising |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Human and animal | Sensitising |
| toluene | Guinea pig | Not classified |
| 4-methylpentan-2-one | Guinea pig | Not classified |
| cumene | Guinea pig | Not classified |
| chlorobenzene | Multiple animal species | Not classified |
| maleic anhydride | Multiple animal species | Sensitising |

Respiratory Sensitisation

| Name | Species | Value |
|---|---------|----------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Human | Not classified |
| maleic anhydride | Human | Sensitising |

Germ Cell Mutagenicity

| Name | Route | Value |
|---------------|----------|--|
| xylene | In Vitro | Not mutagenic |
| xylene | In vivo | Not mutagenic |
| cyclohexane | In Vitro | Not mutagenic |
| cyclohexane | In vivo | Some positive data exist, but the data are not sufficient for classification |
| ethanol | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| ethanol | In vivo | Some positive data exist, but the data are not sufficient for classification |
| ethyl acetate | In Vitro | Not mutagenic |
| ethyl acetate | In vivo | Not mutagenic |
| methanol | In Vitro | Some positive data exist, but the data are not sufficient for classification |

3M Primer 94 (Ampoules)

| | | |
|---|----------|--|
| methanol | In vivo | Some positive data exist, but the data are not sufficient for classification |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | In vivo | Not mutagenic |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| toluene | In Vitro | Not mutagenic |
| toluene | In vivo | Not mutagenic |
| 4-methylpentan-2-one | In Vitro | Not mutagenic |
| cumene | In Vitro | Not mutagenic |
| cumene | In vivo | Not mutagenic |
| chlorobenzene | In Vitro | Not mutagenic |
| maleic anhydride | In vivo | Not mutagenic |
| maleic anhydride | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|---|------------|-------------------------|--|
| xylene | Dermal | Rat | Not carcinogenic |
| xylene | Ingestion | Multiple animal species | Not carcinogenic |
| xylene | Inhalation | Human | Some positive data exist, but the data are not sufficient for classification |
| ethanol | Ingestion | Multiple animal species | Some positive data exist, but the data are not sufficient for classification |
| methanol | Inhalation | Multiple animal species | Not carcinogenic |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| toluene | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| toluene | Ingestion | Rat | Some positive data exist, but the data are not sufficient for classification |
| toluene | Inhalation | Mouse | Some positive data exist, but the data are not sufficient for classification |
| 4-methylpentan-2-one | Inhalation | Multiple animal species | Carcinogenic. |
| cumene | Inhalation | Multiple animal species | Carcinogenic. |
| chlorobenzene | Ingestion | Multiple animal species | Not carcinogenic |

Reproductive Toxicity**Reproductive and/or Developmental Effects**

| Name | Route | Value | Species | Test result | Exposure Duration |
|-------------|------------|--|-------------------------|---------------------|-----------------------|
| xylene | Inhalation | Not classified for female reproduction | Human | NOAEL Not available | occupational exposure |
| xylene | Ingestion | Not classified for development | Mouse | NOAEL Not available | during organogenesis |
| xylene | Inhalation | Not classified for development | Multiple animal species | NOAEL Not available | during gestation |
| cyclohexane | Inhalation | Not classified for female reproduction | Rat | NOAEL 24 mg/l | 2 generation |

3M Primer 94 (Ampoules)

| | | | | | |
|---|------------|--|-------------------------|-----------------------|------------------------------|
| cyclohexane | Inhalation | Not classified for male reproduction | Rat | NOAEL 24 mg/l | 2 generation |
| cyclohexane | Inhalation | Not classified for development | Rat | NOAEL 6.9 mg/l | 2 generation |
| ethanol | Inhalation | Not classified for development | Rat | NOAEL 38 mg/l | during gestation |
| ethanol | Ingestion | Not classified for development | Rat | NOAEL 5,200 mg/kg/day | premating & during gestation |
| methanol | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,600 mg/kg/day | 21 days |
| methanol | Ingestion | Toxic to development | Mouse | LOAEL 4,000 mg/kg/day | during organogenesis |
| methanol | Inhalation | Toxic to development | Mouse | NOAEL 1.3 mg/l | during organogenesis |
| 2-(3,4-Epoxy-cyclohexyl)ethyltrimethoxysilane | Ingestion | Not classified for development | Rabbit | NOAEL 0.27 mg/kg/day | during organogenesis |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Not classified for male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | Not classified for development | Rabbit | NOAEL 300 mg/kg/day | during organogenesis |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | Not classified for development | Rat | NOAEL 750 mg/kg/day | 2 generation |
| toluene | Inhalation | Not classified for female reproduction | Human | NOAEL Not available | occupational exposure |
| toluene | Inhalation | Not classified for male reproduction | Rat | NOAEL 2.3 mg/l | 1 generation |
| toluene | Ingestion | Toxic to development | Rat | LOAEL 520 mg/kg/day | during gestation |
| toluene | Inhalation | Toxic to development | Human | NOAEL Not available | poisoning and/or abuse |
| 4-methylpentan-2-one | Inhalation | Not classified for female reproduction | Multiple animal species | NOAEL 8.2 mg/l | 2 generation |
| 4-methylpentan-2-one | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| 4-methylpentan-2-one | Inhalation | Not classified for male reproduction | Multiple animal species | NOAEL 8.2 mg/l | 2 generation |
| 4-methylpentan-2-one | Inhalation | Not classified for development | Mouse | NOAEL 12.3 mg/l | during organogenesis |
| cumene | Inhalation | Not classified for development | Rabbit | NOAEL 11.3 mg/l | during organogenesis |
| chlorobenzene | Inhalation | Not classified for female reproduction | Rat | NOAEL 2.07 mg/l | 2 generation |
| chlorobenzene | Ingestion | Not classified for development | Rat | NOAEL 300 mg/kg/day | during organogenesis |
| chlorobenzene | Inhalation | Not classified for development | Rat | NOAEL 2.07 mg/l | 2 generation |
| chlorobenzene | Inhalation | Not classified for male reproduction | Rat | NOAEL 2.07 mg/l | 2 generation |
| maleic anhydride | Ingestion | Not classified for female reproduction | Rat | NOAEL 55 mg/kg/day | 2 generation |
| maleic anhydride | Ingestion | Not classified for male reproduction | Rat | NOAEL 55 mg/kg/day | 2 generation |
| maleic anhydride | Ingestion | Not classified for development | Rat | NOAEL 140 mg/kg/day | during organogenesis |

Lactation

| Name | Route | Species | Value |
|--------|-----------|---------|--|
| xylene | Ingestion | Mouse | Not classified for effects on or via lactation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---------------|------------|-----------------------------------|--|-------------------------|---------------------|------------------------|
| xylene | Inhalation | auditory system | Causes damage to organs | Rat | LOAEL 6.3 mg/l | 8 hours |
| xylene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| xylene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| xylene | Inhalation | eyes | Not classified | Rat | NOAEL 3.5 mg/l | not available |
| xylene | Inhalation | liver | Not classified | Multiple animal species | NOAEL Not available | |
| xylene | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Multiple animal species | NOAEL Not available | |
| xylene | Ingestion | eyes | Not classified | Rat | NOAEL 250 mg/kg | not applicable |
| cyclohexane | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human and animal | NOAEL Not available | |
| cyclohexane | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human and animal | NOAEL Not available | |
| cyclohexane | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Professional judgement | NOAEL Not available | |
| ethanol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | LOAEL 9.4 mg/l | not available |
| ethanol | Inhalation | central nervous system depression | Not classified | Human and animal | NOAEL not available | |
| ethanol | Ingestion | central nervous system depression | Not classified | Multiple animal species | NOAEL not available | |
| ethanol | Ingestion | kidney and/or bladder | Not classified | Dog | NOAEL 3,000 mg/kg | |
| ethyl acetate | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| ethyl acetate | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| ethyl acetate | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| methanol | Inhalation | blindness | Causes damage to organs | Human | NOAEL Not available | occupational exposure |
| methanol | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | not available |
| methanol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL Not available | 6 hours |
| methanol | Ingestion | blindness | Causes damage to organs | Human | NOAEL Not available | poisoning and/or abuse |
| methanol | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | poisoning and/or abuse |
| toluene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| toluene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |

| | | | | | | |
|----------------------|------------|-----------------------------------|--|-------------------------|---------------------|------------------------|
| toluene | Inhalation | immune system | Not classified | Mouse | NOAEL 0.004 mg/l | 3 hours |
| toluene | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | poisoning and/or abuse |
| 4-methylpentan-2-one | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | LOAEL 0.1 mg/l | 2 hours |
| 4-methylpentan-2-one | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| 4-methylpentan-2-one | Inhalation | vascular system | Not classified | Dog | NOAEL Not available | not available |
| 4-methylpentan-2-one | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Rat | LOAEL 900 mg/kg | not applicable |
| cumene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Multiple animal species | NOAEL Not available | not available |
| cumene | Inhalation | respiratory irritation | May cause respiratory irritation | Human | LOAEL 0.2 mg/l | occupational exposure |
| cumene | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Multiple animal species | NOAEL Not available | not available |
| chlorobenzene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| chlorobenzene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | occupational exposure |
| maleic anhydride | Inhalation | respiratory irritation | May cause respiratory irritation | Human | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|-------------|------------|--|--|-------------------------|-----------------------|-------------------|
| xylene | Inhalation | nervous system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.4 mg/l | 4 weeks |
| xylene | Inhalation | auditory system | May cause damage to organs though prolonged or repeated exposure | Rat | LOAEL 7.8 mg/l | 5 days |
| xylene | Inhalation | liver | Not classified | Multiple animal species | NOAEL Not available | |
| xylene | Inhalation | heart endocrine system gastrointestinal tract hematopoietic system muscles kidney and/or bladder respiratory system | Not classified | Multiple animal species | NOAEL 3.5 mg/l | 13 weeks |
| xylene | Ingestion | auditory system | Not classified | Rat | NOAEL 900 mg/kg/day | 2 weeks |
| xylene | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 1,500 mg/kg/day | 90 days |
| xylene | Ingestion | liver | Not classified | Multiple animal species | NOAEL Not available | |
| xylene | Ingestion | heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system nervous system respiratory system | Not classified | Mouse | NOAEL 1,000 mg/kg/day | 103 weeks |
| cyclohexane | Inhalation | liver | Not classified | Rat | NOAEL 24 mg/l | 90 days |

3M Primer 94 (Ampoules)

| | | | | | | |
|---|------------|--|--|----------|-----------------------|------------------------|
| cyclohexane | Inhalation | auditory system | Not classified | Rat | NOAEL 1.7 mg/l | 90 days |
| cyclohexane | Inhalation | kidney and/or bladder | Not classified | Rabbit | NOAEL 2.7 mg/l | 10 weeks |
| cyclohexane | Inhalation | hematopoietic system | Not classified | Mouse | NOAEL 24 mg/l | 14 weeks |
| cyclohexane | Inhalation | peripheral nervous system | Not classified | Rat | NOAEL 8.6 mg/l | 30 weeks |
| ethanol | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Rabbit | LOAEL 124 mg/l | 365 days |
| ethanol | Inhalation | hematopoietic system immune system | Not classified | Rat | NOAEL 25 mg/l | 14 days |
| ethanol | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 8,000 mg/kg/day | 4 months |
| ethanol | Ingestion | kidney and/or bladder | Not classified | Dog | NOAEL 3,000 mg/kg/day | 7 days |
| ethyl acetate | Inhalation | endocrine system liver nervous system | Not classified | Rat | NOAEL 0.043 mg/l | 90 days |
| ethyl acetate | Inhalation | hematopoietic system | Not classified | Rabbit | LOAEL 16 mg/l | 40 days |
| ethyl acetate | Ingestion | hematopoietic system liver kidney and/or bladder | Not classified | Rat | NOAEL 3,600 mg/kg/day | 90 days |
| methanol | Inhalation | liver | Not classified | Rat | NOAEL 6.55 mg/l | 4 weeks |
| methanol | Inhalation | respiratory system | Not classified | Rat | NOAEL 13.1 mg/l | 6 weeks |
| methanol | Ingestion | liver nervous system | Not classified | Rat | NOAEL 2,500 mg/kg/day | 90 days |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Dermal | nervous system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | Ingestion | auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder | Not classified | Rat | NOAEL 1,000 mg/kg/day | 28 days |
| toluene | Inhalation | auditory system nervous system eyes olfactory system | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| toluene | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 2.3 mg/l | 15 months |
| toluene | Inhalation | heart liver kidney and/or bladder | Not classified | Rat | NOAEL 11.3 mg/l | 15 weeks |
| toluene | Inhalation | endocrine system | Not classified | Rat | NOAEL 1.1 mg/l | 4 weeks |
| toluene | Inhalation | immune system | Not classified | Mouse | NOAEL Not available | 20 days |
| toluene | Inhalation | bone, teeth, nails, and/or hair | Not classified | Mouse | NOAEL 1.1 mg/l | 8 weeks |
| toluene | Inhalation | hematopoietic system vascular system | Not classified | Human | NOAEL Not available | occupational exposure |
| toluene | Inhalation | gastrointestinal tract | Not classified | Multiple | NOAEL 11.3 | 15 weeks |

3M Primer 94 (Ampoules)

| | | | | animal species | mg/l | |
|----------------------|------------|--|--|-------------------------|-----------------------|--------------|
| toluene | Ingestion | nervous system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 625 mg/kg/day | 13 weeks |
| toluene | Ingestion | heart | Not classified | Rat | NOAEL 2,500 mg/kg/day | 13 weeks |
| toluene | Ingestion | liver kidney and/or bladder | Not classified | Multiple animal species | NOAEL 2,500 mg/kg/day | 13 weeks |
| toluene | Ingestion | hematopoietic system | Not classified | Mouse | NOAEL 600 mg/kg/day | 14 days |
| toluene | Ingestion | endocrine system | Not classified | Mouse | NOAEL 105 mg/kg/day | 28 days |
| toluene | Ingestion | immune system | Not classified | Mouse | NOAEL 105 mg/kg/day | 4 weeks |
| 4-methylpentan-2-one | Inhalation | liver | Not classified | Rat | NOAEL 0.41 mg/l | 13 weeks |
| 4-methylpentan-2-one | Inhalation | heart | Not classified | Multiple animal species | NOAEL 0.8 mg/l | 2 weeks |
| 4-methylpentan-2-one | Inhalation | kidney and/or bladder | Not classified | Multiple animal species | NOAEL 0.4 mg/l | 90 days |
| 4-methylpentan-2-one | Inhalation | respiratory system | Not classified | Multiple animal species | NOAEL 4.1 mg/l | 14 weeks |
| 4-methylpentan-2-one | Inhalation | endocrine system hematopoietic system | Not classified | Multiple animal species | NOAEL 0.41 mg/l | 90 days |
| 4-methylpentan-2-one | Inhalation | nervous system | Not classified | Multiple animal species | NOAEL 0.41 mg/l | 13 weeks |
| 4-methylpentan-2-one | Ingestion | endocrine system hematopoietic system liver kidney and/or bladder | Not classified | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| 4-methylpentan-2-one | Ingestion | heart immune system muscles nervous system respiratory system | Not classified | Rat | NOAEL 1,040 mg/kg/day | 120 days |
| cumene | Inhalation | auditory system endocrine system hematopoietic system liver nervous system eyes | Not classified | Rat | NOAEL 59 mg/l | 13 weeks |
| cumene | Inhalation | kidney and/or bladder | Not classified | Rat | NOAEL 4.9 mg/l | 13 weeks |
| cumene | Inhalation | respiratory system | Not classified | Rat | NOAEL 59 mg/l | 13 weeks |
| cumene | Ingestion | kidney and/or bladder heart endocrine system hematopoietic system liver respiratory system | Not classified | Rat | NOAEL 769 mg/kg/day | 6 months |
| chlorobenzene | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 0.69 mg/l | 2 generation |
| chlorobenzene | Inhalation | liver | Not classified | Rat | NOAEL 2.1 mg/l | 2 generation |
| chlorobenzene | Inhalation | blood | Not classified | Rat | NOAEL 0.35 mg/l | 24 weeks |
| chlorobenzene | Ingestion | bone marrow | Some positive data exist, but the data are not sufficient for | Rat | NOAEL 250 mg/kg/day | 13 weeks |

3M Primer 94 (Ampoules)

| | | | classification | | | |
|------------------|------------|---|--|-----|---------------------|----------|
| chlorobenzene | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 188 mg/kg/day | 192 days |
| chlorobenzene | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 125 mg/kg/day | 13 weeks |
| chlorobenzene | Ingestion | immune system | Not classified | Rat | NOAEL 750 mg/kg/day | 13 weeks |
| maleic anhydride | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.0011 mg/l | 6 months |
| maleic anhydride | Inhalation | endocrine system hematopoietic system nervous system kidney and/or bladder heart liver eyes | Not classified | Rat | NOAEL 0.0098 mg/l | 6 months |
| maleic anhydride | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 55 mg/kg/day | 80 days |
| maleic anhydride | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Rat | LOAEL 250 mg/kg/day | 183 days |
| maleic anhydride | Ingestion | heart nervous system | Not classified | Rat | NOAEL 600 mg/kg/day | 183 days |
| maleic anhydride | Ingestion | gastrointestinal tract | Not classified | Rat | NOAEL 150 mg/kg/day | 80 days |
| maleic anhydride | Ingestion | hematopoietic system | Not classified | Dog | NOAEL 60 mg/kg/day | 90 days |
| maleic anhydride | Ingestion | skin endocrine system immune system eyes respiratory system | Not classified | Rat | NOAEL 150 mg/kg/day | 80 days |

Aspiration Hazard

| Name | Value |
|----------------------|--|
| xylene | Aspiration hazard |
| cyclohexane | Aspiration hazard |
| toluene | Aspiration hazard |
| 4-methylpentan-2-one | Some positive data exist, but the data are not sufficient for classification |
| cumene | Aspiration hazard |

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

11.2. Information on other hazards

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

SECTION 12: Ecological information

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

12.1. Toxicity

No product test data available.

| Material | CAS # | Organism | Type | Exposure | Test endpoint | Test result |
|----------|-------|----------|------|----------|---------------|-------------|
|----------|-------|----------|------|----------|---------------|-------------|

3M Primer 94 (Ampoules)

| | | | | | | |
|------------------|--------------|------------------|---|----------|-------|---------------------------|
| cyclohexane | 110-82-7 | Bacteria | Experimental | 24 hours | IC50 | 97 mg/l |
| cyclohexane | 110-82-7 | Fathead minnow | Experimental | 96 hours | LC50 | 4.53 mg/l |
| cyclohexane | 110-82-7 | Water flea | Experimental | 48 hours | EC50 | 0.9 mg/l |
| xylene | 1330-20-7 | Activated sludge | Estimated | 3 hours | NOEC | 157 mg/l |
| xylene | 1330-20-7 | Green algae | Estimated | 72 hours | EC50 | 4.36 mg/l |
| xylene | 1330-20-7 | Rainbow trout | Estimated | 96 hours | LC50 | 2.6 mg/l |
| xylene | 1330-20-7 | Water flea | Estimated | 48 hours | EC50 | 3.82 mg/l |
| xylene | 1330-20-7 | Green algae | Estimated | 72 hours | NOEC | 0.44 mg/l |
| xylene | 1330-20-7 | Water flea | Estimated | 7 days | NOEC | 0.96 mg/l |
| xylene | 1330-20-7 | Rainbow trout | Experimental | 56 days | NOEC | >1.3 mg/l |
| cumene | 98-82-8 | Activated sludge | Experimental | 3 hours | EC10 | >2,000 mg/l |
| cumene | 98-82-8 | Green algae | Experimental | 72 hours | EC50 | 2.6 mg/l |
| cumene | 98-82-8 | Mysid Shrimp | Experimental | 96 hours | EC50 | 1.2 mg/l |
| cumene | 98-82-8 | Rainbow trout | Experimental | 96 hours | LC50 | 2.7 mg/l |
| cumene | 98-82-8 | Water flea | Experimental | 48 hours | EC50 | 2.14 mg/l |
| cumene | 98-82-8 | Green algae | Experimental | 72 hours | NOEC | 0.22 mg/l |
| cumene | 98-82-8 | Water flea | Experimental | 21 days | NOEC | 0.35 mg/l |
| chlorobenzene | 108-90-7 | Bluegill | Experimental | 96 hours | LC50 | 4.5 mg/l |
| chlorobenzene | 108-90-7 | Green algae | Experimental | 72 hours | ErC50 | 11.4 mg/l |
| chlorobenzene | 108-90-7 | Midge | Experimental | 96 hours | NOEC | 0.7 mg/l |
| chlorobenzene | 108-90-7 | Water flea | Experimental | 48 hours | EC50 | 0.59 mg/l |
| chlorobenzene | 108-90-7 | Green algae | Experimental | 72 hours | ErC10 | 5.8 mg/l |
| chlorobenzene | 108-90-7 | Medaka | Experimental | 43 days | NOEC | 0.247 mg/l |
| chlorobenzene | 108-90-7 | Water flea | Experimental | 8 days | NOEC | 0.084 mg/l |
| chlorobenzene | 108-90-7 | Bacteria | Experimental | 24 hours | IC50 | 0.71 mg/l |
| chlorobenzene | 108-90-7 | Lettuce | Experimental | 14 days | EC50 | >1,000 mg/kg (Dry Weight) |
| ethanol | 64-17-5 | Fathead minnow | Experimental | 96 hours | LC50 | 14,200 mg/l |
| ethanol | 64-17-5 | Fish | Experimental | 96 hours | LC50 | 11,000 mg/l |
| ethanol | 64-17-5 | Green algae | Experimental | 72 hours | EC50 | 275 mg/l |
| ethanol | 64-17-5 | Water flea | Experimental | 48 hours | LC50 | 5,012 mg/l |
| ethanol | 64-17-5 | Green algae | Experimental | 72 hours | ErC10 | 11.5 mg/l |
| ethanol | 64-17-5 | Water flea | Experimental | 10 days | NOEC | 9.6 mg/l |
| Acrylate Polymer | Trade Secret | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |

3M Primer 94 (Ampoules)

| | | | | | | |
|---|-----------|-------------------------------|--------------------|------------|-------|---------------------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Activated sludge | Analogous Compound | 3 hours | IC50 | >100 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Rainbow trout | Estimated | 96 hours | LC50 | 2 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Water flea | Estimated | 48 hours | EC50 | 1.8 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Green algae | Experimental | 72 hours | ErC50 | >11 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Green algae | Experimental | 72 hours | NOEC | 4.2 mg/l |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Water flea | Experimental | 21 days | NOEC | 0.3 mg/l |
| ethyl acetate | 141-78-6 | Bacteria | Experimental | 18 hours | EC10 | 2,900 mg/l |
| ethyl acetate | 141-78-6 | Fish | Experimental | 96 hours | LC50 | 212.5 mg/l |
| ethyl acetate | 141-78-6 | Invertebrate | Experimental | 48 hours | EC50 | 165 mg/l |
| ethyl acetate | 141-78-6 | Green algae | Experimental | 72 hours | NOEC | >100 mg/l |
| ethyl acetate | 141-78-6 | Water flea | Experimental | 21 days | NOEC | 2.4 mg/l |
| methanol | 67-56-1 | Algae or other aquatic plants | Experimental | 96 hours | EC50 | 16.9 mg/l |
| methanol | 67-56-1 | Bay mussel | Experimental | 96 hours | LC50 | 15,900 mg/l |
| methanol | 67-56-1 | Bluegill | Experimental | 96 hours | LC50 | 15,400 mg/l |
| methanol | 67-56-1 | Green algae | Experimental | 96 hours | ErC50 | 22,000 mg/l |
| methanol | 67-56-1 | Sediment organism | Experimental | 96 hours | LC50 | 54,890 mg/l |
| methanol | 67-56-1 | Water flea | Experimental | 48 hours | LC50 | 3,289 mg/l |
| methanol | 67-56-1 | Green algae | Experimental | 96 hours | NOEC | 9.96 mg/l |
| methanol | 67-56-1 | Medaka | Experimental | 8.33 days | NOEC | 158,000 mg/l |
| methanol | 67-56-1 | Water flea | Experimental | 21 days | NOEC | 122 mg/l |
| methanol | 67-56-1 | Activated sludge | Experimental | 3 hours | IC50 | >1,000 mg/l |
| methanol | 67-56-1 | Barley | Experimental | 14 days | EC50 | 15,492 mg/kg (Dry Weight) |
| methanol | 67-56-1 | Redworm | Experimental | 63 days | EC50 | 26,646 mg/kg (Dry Weight) |
| methanol | 67-56-1 | Springtail | Experimental | 28 days | EC50 | 5,683 mg/kg (Dry Weight) |
| 4-methylpentan-2-one | 108-10-1 | Green algae | Experimental | 96 hours | EC50 | 400 mg/l |
| 4-methylpentan-2-one | 108-10-1 | Water flea | Experimental | 48 hours | EC50 | >200 mg/l |
| 4-methylpentan-2-one | 108-10-1 | Zebra Fish | Experimental | 96 hours | LC50 | >179 mg/l |
| 4-methylpentan-2-one | 108-10-1 | Fathead minnow | Experimental | 32 days | NOEC | 56.2 mg/l |
| 4-methylpentan-2-one | 108-10-1 | Water flea | Experimental | 21 days | NOEC | 78 mg/l |
| 4-methylpentan-2-one | 108-10-1 | Activated sludge | Experimental | 30 minutes | EC50 | >1,000 |

3M Primer 94 (Ampoules)

| | | | | | | |
|---|------------|------------------|---|------------|-------|------------------------------|
| toluene | 108-88-3 | Coho Salmon | Experimental | 96 hours | LC50 | 5.5 mg/l |
| toluene | 108-88-3 | Grass Shrimp | Experimental | 96 hours | LC50 | 9.5 mg/l |
| toluene | 108-88-3 | Green algae | Experimental | 72 hours | EC50 | 12.5 mg/l |
| toluene | 108-88-3 | Leopard frog | Experimental | 9 days | LC50 | 0.39 mg/l |
| toluene | 108-88-3 | Pink Salmon | Experimental | 96 hours | LC50 | 6.41 mg/l |
| toluene | 108-88-3 | Water flea | Experimental | 48 hours | EC50 | 3.78 mg/l |
| toluene | 108-88-3 | Coho Salmon | Experimental | 40 days | NOEC | 1.39 mg/l |
| toluene | 108-88-3 | Diatom | Experimental | 72 hours | NOEC | 10 mg/l |
| toluene | 108-88-3 | Water flea | Experimental | 7 days | NOEC | 0.74 mg/l |
| toluene | 108-88-3 | Activated sludge | Experimental | 12 hours | IC50 | 292 mg/l |
| toluene | 108-88-3 | Bacteria | Experimental | 16 hours | NOEC | 29 mg/l |
| toluene | 108-88-3 | Bacteria | Experimental | 24 hours | EC50 | 84 mg/l |
| toluene | 108-88-3 | Redworm | Experimental | 28 days | LC50 | >150 mg per kg of bodyweight |
| toluene | 108-88-3 | Soil microbes | Experimental | 28 days | NOEC | <26 mg/kg (Dry Weight) |
| 2,5-Furandione, reaction products with polypropylene, chlorinated | 68609-36-9 | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| 2-(3,4-Epoxy cyclohexyl)ethyl trimethoxysilane | 3388-04-3 | Activated sludge | Estimated | 30 minutes | IC50 | >100 mg/l |
| 2-(3,4-Epoxy cyclohexyl)ethyl trimethoxysilane | 3388-04-3 | Green algae | Estimated | 72 hours | EC50 | 280 mg/l |
| 2-(3,4-Epoxy cyclohexyl)ethyl trimethoxysilane | 3388-04-3 | Rainbow trout | Estimated | 96 hours | LC50 | 180 mg/l |
| 2-(3,4-Epoxy cyclohexyl)ethyl trimethoxysilane | 3388-04-3 | Water flea | Estimated | 48 hours | EC50 | 20 mg/l |
| 2-(3,4-Epoxy cyclohexyl)ethyl trimethoxysilane | 3388-04-3 | Green algae | Estimated | 72 hours | NOEC | 1 mg/l |
| maleic anhydride | 108-31-6 | Bacteria | Experimental | 18 hours | EC10 | 44.6 mg/l |
| maleic anhydride | 108-31-6 | Rainbow trout | Experimental | 96 hours | LC50 | 75 mg/l |
| maleic anhydride | 108-31-6 | Green algae | Hydrolysis Product | 72 hours | ErC50 | 74.4 mg/l |
| maleic anhydride | 108-31-6 | Water flea | Hydrolysis Product | 48 hours | EC50 | 93.8 mg/l |
| maleic anhydride | 108-31-6 | Water flea | Experimental | 21 days | NOEC | 10 mg/l |
| maleic anhydride | 108-31-6 | Green algae | Hydrolysis Product | 72 hours | ErC10 | 11.8 mg/l |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|-------------|----------|-----------------------------|----------|----------------------|------------------|-------------------------------------|
| cyclohexane | 110-82-7 | Experimental Biodegradation | 28 days | BOD | 77 %BOD/ThO D | OECD 301F - Manometric respirometry |
| cyclohexane | 110-82-7 | Experimental | | Photolytic half-life | 4.1 days (t 1/2) | |

3M Primer 94 (Ampoules)

| | | | | | | |
|---|--------------|--------------------------------------|---------|-------------------------------|--------------------------------------|-------------------------------------|
| | | Photolysis | | (in air) | | |
| xylene | 1330-20-7 | Experimental Biodegradation | 28 days | BOD | 90-98 %BOD/ThOD | OECD 301F - Manometric respirometry |
| xylene | 1330-20-7 | Experimental Photolysis | | Photolytic half-life (in air) | 1.4 days (t 1/2) | |
| cumene | 98-82-8 | Experimental Biodegradation | 14 days | BOD | 33 %BOD/ThOD | OECD 301C - MITI test (I) |
| cumene | 98-82-8 | Experimental Photolysis | | Photolytic half-life (in air) | 4.5 days (t 1/2) | |
| chlorobenzene | 108-90-7 | Experimental Biodegradation | 28 days | BOD | 15 %BOD/ThOD | OECD 301F - Manometric respirometry |
| chlorobenzene | 108-90-7 | Experimental Photolysis | | Photolytic half-life (in air) | 42 days (t 1/2) | |
| chlorobenzene | 108-90-7 | Experimental Biodegradation | | Half-life (t 1/2) | 46.2 days (t 1/2) | |
| ethanol | 64-17-5 | Experimental Biodegradation | 14 days | BOD | 89 %BOD/ThOD | OECD 301C - MITI test (I) |
| Acrylate Polymer | Trade Secret | Data not available - insufficient | N/A | N/A | N/A | N/A |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Experimental Biodegradation | 28 days | BOD | 5 %BOD/COD | OECD 301F - Manometric respirometry |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Experimental Hydrolysis | | Hydrolytic half-life (pH 7) | 117 hours (t 1/2) | OECD 111 Hydrolysis function of pH |
| ethyl acetate | 141-78-6 | Experimental Biodegradation | 14 days | BOD | 94 %BOD/ThOD | OECD 301C - MITI test (I) |
| ethyl acetate | 141-78-6 | Experimental Photolysis | | Photolytic half-life (in air) | 20.0 days (t 1/2) | |
| methanol | 67-56-1 | Experimental Biodegradation | 3 days | Percent degraded | 91 %degraded | |
| methanol | 67-56-1 | Experimental Biodegradation | 14 days | BOD | 92 %BOD/ThOD | OECD 301C - MITI test (I) |
| methanol | 67-56-1 | Experimental Photolysis | | Photolytic half-life (in air) | 35 days (t 1/2) | |
| methanol | 67-56-1 | Experimental Soil Metabolism Aerobic | 5 days | CO2 evolution | 53.4 %CO2 evolution/THC O2 evolution | |
| 4-methylpentan-2-one | 108-10-1 | Experimental Biodegradation | 28 days | BOD | 83 %BOD/ThOD | OECD 301F - Manometric respirometry |
| 4-methylpentan-2-one | 108-10-1 | Experimental Photolysis | | Photolytic half-life (in air) | 2.3 days (t 1/2) | |
| toluene | 108-88-3 | Experimental Biodegradation | 20 days | BOD | 80 %BOD/ThOD | APHA Std Meth Water/Wastewater |
| toluene | 108-88-3 | Experimental Photolysis | | Photolytic half-life (in air) | 5.2 days (t 1/2) | |
| 2,5-Furandione, reaction products with polypropylene, chlorinated | 68609-36-9 | Data not available - insufficient | N/A | N/A | N/A | N/A |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | 3388-04-3 | Estimated Biodegradation | 28 days | BOD | 28 %BOD/ThOD | OECD 301D - Closed bottle test |
| 2-(3,4-Epoxy cyclohexyl)ethyltrimethoxysilane | 3388-04-3 | Estimated Hydrolysis | | Hydrolytic half-life | 6.5 hours (t 1/2) | |
| maleic anhydride | 108-31-6 | Hydrolysis product Biodegradation | 25 days | CO2 evolution | >90 %CO2 evolution/THC O2 evolution | OECD 301B - Modified Sturm or CO2 |
| maleic anhydride | 108-31-6 | Experimental Hydrolysis | | Hydrolytic half-life | 0.37 minutes (t 1/2) | |

12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|-------------|----------|--------------------|----------|-----------------|-------------|--------------------------|
| cyclohexane | 110-82-7 | Experimental BCF - | 56 days | Bioaccumulation | 129 | OECD305-Bioconcentration |

3M Primer 94 (Ampoules)

| | | Fish | | factor | | |
|---|--------------|---|----------|------------------------|-------|---------------------------------|
| cyclohexane | 110-82-7 | Experimental Bioconcentration | | Log Kow | 3.44 | |
| xylene | 1330-20-7 | Experimental BCF - Fish | 56 days | Bioaccumulation factor | 25.9 | |
| cumene | 98-82-8 | Modeled Bioconcentration | | Bioaccumulation factor | 140 | Catalogic™ |
| cumene | 98-82-8 | Experimental Bioconcentration | | Log Kow | 3.55 | OECD 107 log Kow shke flask mtd |
| chlorobenzene | 108-90-7 | Experimental BCF - Fish | 56 days | Bioaccumulation factor | 39.6 | OECD305-Bioconcentration |
| chlorobenzene | 108-90-7 | Experimental Bioconcentration | | Log Kow | 2.84 | |
| ethanol | 64-17-5 | Experimental Bioconcentration | | Log Kow | -0.35 | |
| Acrylate Polymer | Trade Secret | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Experimental Bioconcentration | | Log Kow | 3.242 | OECD 117 log Kow HPLC method |
| ethyl acetate | 141-78-6 | Experimental Bioconcentration | | Log Kow | 0.68 | |
| methanol | 67-56-1 | Experimental BCF - Fish | 3 days | Bioaccumulation factor | <4.5 | |
| methanol | 67-56-1 | Experimental Bioconcentration | | Log Kow | -0.77 | |
| 4-methylpentan-2-one | 108-10-1 | Experimental Bioconcentration | | Log Kow | 1.9 | OECD 117 log Kow HPLC method |
| toluene | 108-88-3 | Experimental BCF - Other | 72 hours | Bioaccumulation factor | 90 | |
| toluene | 108-88-3 | Experimental Bioconcentration | | Log Kow | 2.73 | |
| 2,5-Furandione, reaction products with polypropylene, chlorinated | 68609-36-9 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| 2-(3,4-Epoxyoctahydro-2H-pyran-2-yl)ethyltrimethoxysilane | 3388-04-3 | Estimated Bioconcentration | | Bioaccumulation factor | 2.3 | |
| maleic anhydride | 108-31-6 | Experimental Bioconcentration | | Log Kow | -2.61 | OECD 107 log Kow shke flask mtd |

12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|---|-----------|-------------------------------|------------|-------------|-----------|
| cyclohexane | 110-82-7 | Modeled Mobility in Soil | Koc | 770 l/kg | |
| cumene | 98-82-8 | Modeled Mobility in Soil | Koc | 700 | Episuite™ |
| chlorobenzene | 108-90-7 | Experimental Mobility in Soil | Koc | 140 l/kg | |
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Modeled Mobility in Soil | Koc | 450 l/kg | Episuite™ |
| methanol | 67-56-1 | Experimental Mobility in Soil | Koc | 0.13 l/kg | |
| 4-methylpentan-2-one | 108-10-1 | Modeled Mobility in Soil | Koc | 150 l/kg | Episuite™ |
| toluene | 108-88-3 | Experimental Mobility in Soil | Koc | 37-160 l/kg | |
| 2-(3,4-Epoxyoctahydro-2H-pyran-2-yl)ethyltrimethoxysilane | 3388-04-3 | Estimated Mobility in Soil | Koc | 20 l/kg | Episuite™ |

12.5. Results of the PBT and vPvB assessment

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

12.6. Endocrine disrupting properties

This material does not contain any substances that are assessed to be an endocrine disruptor for environmental effects

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

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

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

EU waste code (product as sold)

070104* Other organic solvents, washing liquids and mother liquors
08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances

SECTION 14: Transportation information

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|--|---|---|---|
| 14.1 UN number or ID number | UN1993 | UN1993 | UN1993 |
| 14.2 UN proper shipping name | FLAMMABLE LIQUID, N.O.S.(CYCLOHEXANE; XYLENE) | FLAMMABLE LIQUID, N.O.S.(CYCLOHEXANE; XYLENE) | FLAMMABLE LIQUID, N.O.S.(CYCLOHEXANE; XYLENE) |
| 14.3 Transport hazard class(es) | 3 | 3 | 3 |
| 14.4 Packing group | II | II | II |
| 14.5 Environmental hazards | Not Environmentally Hazardous | Not applicable | Not a Marine Pollutant |

| | | | |
|---|--|--|--|
| 14.6 Special precautions for user | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. | Please refer to the other sections of the SDS for further information. |
| 14.7 Marine Transport in bulk according to IMO instruments | No data available. | No data available. | No data available. |
| Control Temperature | No data available. | No data available. | No data available. |
| Emergency Temperature | No data available. | No data available. | No data available. |
| ADR Classification Code | F1 | Not applicable. | Not applicable. |
| IMDG Segregation Code | Not applicable. | Not applicable. | NONE |

Please contact the address or phone number listed on the first page of the SDS for additional information on the transport/shipment of the material by rail (RID) or inland waterways (ADN).

SECTION 15: Regulatory information

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

Carcinogenicity

| <u>Ingredient</u> | <u>CAS Nbr</u> | <u>Classification</u> | <u>Regulation</u> |
|---|----------------|-------------------------------|--|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 | Gr. 3: Not classifiable | International Agency for Research on Cancer Regulation (EC) No. 1272/2008, Table 3.1 |
| cumene | 98-82-8 | Carc. 1B | International Agency for Research on Cancer Regulation (EC) No. 1272/2008, Table 3.1 |
| cumene | 98-82-8 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer Regulation (EC) No. 1272/2008, Table 3.1 |
| 4-methylpentan-2-one | 108-10-1 | Carc. 2 | International Agency for Research on Cancer Regulation (EC) No. 1272/2008, Table 3.1 |
| 4-methylpentan-2-one | 108-10-1 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer Regulation (EC) No. 1272/2008, Table 3.1 |
| toluene | 108-88-3 | Gr. 3: Not classifiable | International Agency for Research on Cancer Regulation (EC) No. 1272/2008, Table 3.1 |
| xylene | 1330-20-7 | Gr. 3: Not classifiable | International Agency for Research on Cancer Regulation (EC) No. 1272/2008, Table 3.1 |

Restrictions on the manufacture, placing on the market and use:

The following substance(s) contained in this product is/are subject through Annex XVII of REACH regulation to restrictions on the manufacture, placing on the market and use when present in certain dangerous substances, mixtures and articles. Users of this product are required to comply with the restrictions placed upon it by the aforementioned provision.

| <u>Ingredient</u> | <u>CAS Nbr</u> |
|---|----------------|
| bis-[4-(2,3-epoxipropoxy)phenyl]propane | 1675-54-3 |
| cyclohexane | 110-82-7 |
| methanol | 67-56-1 |
| toluene | 108-88-3 |
| xylene | 1330-20-7 |

Restriction status: listed in REACH Annex XVII

Restricted uses: See Annex XVII to Regulation (EC) No 1907/2006 for Conditions of Restriction

Global inventory status

Contact 3M for more information. This product complies with Measures on Environmental Management of New Chemical Substances. All ingredients are listed on or exempt from on China IECSC inventory. The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

DIRECTIVE 2012/18/EU

Seveso hazard categories, Annex 1, Part 1

| Hazard Categories | Qualifying quantity (tonnes) for the application of | |
|---|---|-------------------------|
| | Lower-tier requirements | Upper-tier requirements |
| E1 Hazardous to the Aquatic environment | 100 | 200 |
| P5c FLAMMABLE LIQUIDS* | 5000 | 50000 |

*If maintained at a temperature above its boiling point or if particular processing conditions, such as high pressure or high temperature, may create major-accident hazards, P5a or P5b FLAMMABLE LIQUIDS may apply

Seveso named dangerous substances, Annex 1, Part 2

| Dangerous Substances | Identifier(s) | Qualifying quantity (tonnes) for the application of | |
|----------------------|---------------|---|-------------------------|
| | | Lower-tier requirements | Upper-tier requirements |
| chlorobenzene | 108-90-7 | 10 | 50 |
| cumene | 98-82-8 | 10 | 50 |
| cyclohexane | 110-82-7 | 10 | 50 |
| ethyl acetate | 141-78-6 | 10 | 50 |
| ethanol | 64-17-5 | 10 | 50 |
| methanol | 67-56-1 | 500 | 5000 |
| 4-methylpentan-2-one | 108-10-1 | 10 | 50 |
| toluene | 108-88-3 | 10 | 50 |
| xylene | 1330-20-7 | 10 | 50 |

Regulation (EU) No 649/2012

No chemicals listed

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out for this mixture. Chemical safety assessments for the contained substances may have been carried out by the registrants of the substances in accordance with Regulation (EC) No 1907/2006, as amended.

SECTION 16: Other information**List of relevant H statements**

| | |
|--------|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| EUH071 | Corrosive to the respiratory tract. |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H301 | Toxic if swallowed. |
| H302 | Harmful if swallowed. |

| | |
|-------|---|
| H304 | May be fatal if swallowed and enters airways. |
| H311 | Toxic in contact with skin. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H350 | May cause cancer. |
| H351 | Suspected of causing cancer. |
| H361d | Suspected of damaging the unborn child. |
| H370 | Causes damage to organs. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure: nervous system sensory organs. |
| 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 2: <125ml Hazard - Health information was modified.

Section 2: <125ml Precautionary - Prevention information was modified.

Section 2: <125ml Precautionary - Response information was modified.

CLP: Ingredient table information was modified.

Label: CLP Classification information was modified.

Label: CLP Precautionary - Prevention information was modified.

Label: CLP Precautionary - Response information was modified.

Section 02: SDS Elements: CLP Supplemental Precautionary Statements information was added.

Section 3: Composition/ Information of ingredients table information was modified.

Section 8: Eye/face protection information information was modified.

Section 8: Occupational exposure limit table information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Aspiration Hazard Table information was modified.

Section 11: Carcinogenicity Table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Health Effects - Eye information information was modified.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Serious Eye Damage/Irritation Table information was modified.

Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Skin Sensitization Table information was modified.

Section 11: Target Organs - Repeated Table information was modified.

Section 11: Target Organs - Single Table information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Mobility in soil information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12: Biocumulative potential information information was modified.

Section 15: Carcinogenicity information information was modified.

Section 15: Seveso Substance Text information was modified.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material.

information was modified.

Annex

| | |
|---|--|
| 1. Title | |
| Substance identification | cyclohexane; EC No. 203-806-2; CAS Nbr 110-82-7; |
| Exposure Scenario Name | Formulation |
| Lifecycle Stage | Use at industrial sites |
| Contributing activities | PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing) ERC 02 -Formulation into mixture |
| Processes, tasks and activities covered | Transfers with dedicated controls, including loading, filling, dumping, bagging. Transfers without dedicated controls, including loading, filling, dumping, bagging. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of use: 8 hours/day; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Provide extract ventilation to points where emissions occur; Environmental: None needed; |
| Waste management measures | Do not apply industrial sludge to natural soils; Prevent discharge of undissolved substance to or recover from wastewater; |
| 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 | xylene; EC No. 215-535-7; CAS Nbr 1330-20-7; |
| Exposure Scenario Name | Formulation |
| Lifecycle Stage | Use at industrial sites |
| Contributing activities | PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities ERC 02 -Formulation into mixture |
| Processes, tasks and activities covered | Transfer of substance/mixture with dedicated engineering controls. Transfers without dedicated controls, including loading, filling, dumping, bagging. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. |

| | |
|----------------------------------|--|
| | General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of use: 8 hours/day; Indoors with enhanced general ventilation; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: Municipal Sewage Treatment Plant; |
| Waste management measures | Do not apply industrial sludge to natural soils; |
| 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 | bis-[4-(2,3-epoxipropoxy)phenyl]propane; EC No. 216-823-5; CAS Nbr 1675-54-3; |
| Exposure Scenario Name | Industrial Use of Adhesives |
| Lifecycle Stage | Use at industrial sites |
| Contributing activities | PROC 07 -Industrial spraying PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC 10 -Roller application or brushing PROC 13 -Treatment of articles by dipping and pouring ERC 05 -Use at industrial site leading to inclusion into/onto article |
| Processes, tasks and activities covered | Application of product with a roller or brush. Screw adhesive application. Spraying of substances/mixtures. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. General operating conditions: Duration of use: 8 hours/day; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Wear chemically resistant gloves (tested to EN374) in combination with ‘basic’ employee training. Refer to Section 8 of the SDS for specific glove material.; Environmental: None needed; ; The following task-specific risk management measures apply in addition to those listed above: Task: PROC07; Human Health; Provide extract ventilation to points where emissions occur; Half-facepiece air-purifying respirator; Task: PROC10; Human Health; Provide extract ventilation to points where emissions occur; |
| Waste management measures | Do not apply industrial sludge to natural soils; |

| | |
|----------------------------------|---|
| | Prevent discharge of undissolved substance to or recover from wastewater; Prevent leaks and prevent soil / water pollution caused by leaks; Sludge should be incinerated, contained or reclaimed; |
| 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 | ethanol; EC No. 200-578-6; CAS Nbr 64-17-5; |
| Exposure Scenario Name | Industrial Use of Coatings |
| Lifecycle Stage | Use at industrial sites |
| Contributing activities | PROC 05 -Mixing or blending in batch processes PROC 07 -Industrial spraying PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC 10 -Roller application or brushing ERC 04 -Use of non-reactive processing aid at industrial site (no inclusion into or onto article) |
| Processes, tasks and activities covered | Application of product. Mixing operations (open systems). Spraying of substances/mixtures. Transfer of substance/mixture with dedicated engineering controls. Transfer of substances/mixtures into small containers e.g. tubes , bottles or small reservoirs. Transfers without dedicated controls, including loading, filling, dumping, bagging. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Continuous release; Duration of use: 8 hours/day; Indoor use; Task: Spraying; Indoors with good general ventilation; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Goggles - Chemical resistant; Environmental: Air abatement; Industrial Sewage Treatment Plant; |
| Waste management measures | Incinerate in a permitted hazardous waste incinerator; |
| 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 | xylene; EC No. 215-535-7; |

| | |
|---|--|
| | CAS Nbr 1330-20-7; |
| Exposure Scenario Name | Industrial Use of Coatings |
| Lifecycle Stage | Use at industrial sites |
| Contributing activities | PROC 05 -Mixing or blending in batch processes PROC 10 -Roller application or brushing ERC 04 -Use of non-reactive processing aid at industrial site (no inclusion into or onto article) |
| Processes, tasks and activities covered | Application of product through a mixing nozzle Application of product with a roller or brush. Application of product with applicator gun. Mixing or blending of solid or liquid materials. Transfers with dedicated controls, including loading, filling, dumping, bagging. Transfers without dedicated controls, including loading, filling, dumping, bagging. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of use: 8 hours/day; Emission days per year: 300 days/year; Indoors with good general ventilation; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: Municipal Sewage Treatment Plant; ; The following task-specific risk management measures apply in addition to those listed above: Task: Mixing; Human Health; Provide extract ventilation to points where emissions occur; |
| Waste management measures | Do not apply industrial sludge to natural soils; |
| 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 | cyclohexane; EC No. 203-806-2; CAS Nbr 110-82-7; |
| Exposure Scenario Name | Industrial Use of Coatings |
| Lifecycle Stage | Use at industrial sites |
| Contributing activities | PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC 10 -Roller application or brushing PROC 13 -Treatment of articles by dipping and pouring ERC 04 -Use of non-reactive processing aid at industrial site (no inclusion into or onto article) |
| Processes, tasks and activities covered | Application of product through a mixing nozzle Application of product with a roller or brush. Application of product with applicator gun. Transfers with |

| | |
|---|---|
| | dedicated controls, including loading, filling, dumping, bagging. Transfers without dedicated controls, including loading, filling, dumping, bagging. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of use: 8 hours/day; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: None needed; ; The following task-specific risk management measures apply in addition to those listed above: Task: PROC08a; Human Health; Provide extract ventilation to points where emissions occur; Task: PROC08b; Human Health; Provide extract ventilation to points where emissions occur; Task: PROC10; Human Health; Provide extract ventilation to points where emissions occur; |
| Waste management measures | Do not apply industrial sludge to natural soils; |
| 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 | bis-[4-(2,3-epoxipropoxy)phenyl]propane; EC No. 216-823-5; CAS Nbr 1675-54-3; |
| Exposure Scenario Name | Professional Use of Adhesives and Sealants |
| Lifecycle Stage | Use at industrial sites |
| Contributing activities | PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC 10 -Roller application or brushing PROC 11 -Non industrial spraying PROC 13 -Treatment of articles by dipping and pouring ERC 08c -Widespread use leading to inclusion into/onto article (indoor) |
| Processes, tasks and activities covered | Application of product with a roller or brush. Screw adhesive application. Spraying of substances/mixtures. Transfers without dedicated controls, including loading, filling, dumping, bagging. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. General operating conditions: Duration of use: 8 hours/day; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: |

| | |
|----------------------------------|--|
| | Human health: Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Refer to Section 8 of the SDS for specific glove material.; Environmental: None needed; ; The following task-specific risk management measures apply in addition to those listed above: Task: PROC11; Human Health; Air-purifying Full-Face (with gas/vapour cartridge, that can be combined with a particulate filter); |
| Waste management measures | Prevent discharge of undissolved substance to or recover from wastewater; Prevent leaks and prevent soil / water pollution caused by leaks; |
| 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 | cyclohexane; EC No. 203-806-2; CAS Nbr 110-82-7; |
| Exposure Scenario Name | Professional Use of Adhesives and Sealants |
| Lifecycle Stage | Widespread use by professional workers |
| Contributing activities | PROC 10 -Roller application or brushing PROC 11 -Non industrial spraying PROC 13 -Treatment of articles by dipping and pouring ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) |
| Processes, tasks and activities covered | Application of product with a roller or brush. Application of product with applicator gun. Spraying of substances/mixtures. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of use: 8 hours/day; Indoor use; Outdoor use; Task: PROC10; Indoors with good general ventilation; Task: Indoor spraying; Handle substance within a predominantly closed system provided with extract ventilation; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: None needed; ; The following task-specific risk management measures apply in addition to those listed above: Task: PROC10; |

| | |
|----------------------------------|--|
| | Human Health; Air-purifying Half-Mask (with gas/vapour-cartridge, that can be combined with a particulate filter) (APF 10); Task: PROC11; Human Health; Air-purifying Half-Mask (with gas/vapour-cartridge, that can be combined with a particulate filter) (APF 10); Task: PROC13; Human Health; Provide extract ventilation to points where emissions occur; |
| Waste management measures | Send to a municipal sewage treatment plant; |
| 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 | ethanol; EC No. 200-578-6; CAS Nbr 64-17-5; |
| Exposure Scenario Name | Professional Use of Coatings |
| Lifecycle Stage | Widespread use by professional workers |
| Contributing activities | PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC 08b -Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC 09 -Transfer of substance or mixture into small containers (dedicated filling line, including weighing) PROC 10 -Roller application or brushing PROC 11 -Non industrial spraying ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) |
| Processes, tasks and activities covered | Spraying of substances/mixtures. Transfer of substances/mixtures into small containers e.g. tubes , bottles or small reservoirs. Transfers with dedicated controls, including loading, filling, dumping, bagging. Transfers without dedicated controls, including loading, filling, dumping, bagging. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Continuous release; Duration of use: 8 hours/day; Indoor use; Task: Spraying; Indoors with good general ventilation; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Goggles - Chemical resistant; Environmental: Air abatement; ; The following task-specific risk management measures apply in addition to those |

| | |
|----------------------------------|--|
| | listed above: Task: Spraying; Human Health; Protective clothing / Wear suitable protective clothing; Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Refer to Section 8 of the SDS for specific glove material.; |
| Waste management measures | Do not release directly to waterways; Incinerate in a permitted hazardous waste incinerator; Send to a municipal sewage treatment plant; |
| 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 | xylene; EC No. 215-535-7; CAS Nbr 1330-20-7; |
| Exposure Scenario Name | Professional Use of Coatings |
| Lifecycle Stage | Widespread use by professional workers |
| Contributing activities | PROC 08a -Transfer of substance or mixture (charging and discharging) at non-dedicated facilities PROC 10 -Roller application or brushing ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) |
| Processes, tasks and activities covered | Application of product with a roller or brush. Application of product with applicator gun. Transfers without dedicated controls, including loading, filling, dumping, bagging. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of use: 8 hours/day; Indoors with enhanced general ventilation; Task: Transferring Material; Duration of use: 4 hours/day; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: Half-facepiece air-purifying respirator; Environmental: Municipal Sewage Treatment Plant; |
| Waste management measures | Do not apply industrial sludge to natural soils; |
| 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 | cyclohexane; EC No. 203-806-2; CAS Nbr 110-82-7; |

| | |
|---|--|
| | |
| Exposure Scenario Name | Professional Use of Coatings |
| Lifecycle Stage | Widespread use by professional workers |
| Contributing activities | PROC 10 -Roller application or brushing PROC 13 -Treatment of articles by dipping and pouring ERC 08a -Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) ERC 08d -Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) |
| Processes, tasks and activities covered | Application of product with a roller or brush. Application of product with applicator gun. |
| 2. Operational conditions and risk management measures | |
| Operating Conditions | Physical state: Liquid. General operating conditions: Assumes use at not more than 20°C above ambient temperature; Duration of use: 8 hours/day; Indoor use; Outdoor use; Task: PROC10; Indoors with good general ventilation; |
| Risk management measures | Under the operational conditions described above the following risk management measures apply: General risk management measures: Human health: None needed; Environmental: None needed; ; The following task-specific risk management measures apply in addition to those listed above: Task: PROC10; Human Health; Air-purifying Half-Mask (with gas/vapour-cartridge, that can be combined with a particulate filter) (APF 10); Task: PROC13; Human Health; Provide extract ventilation to points where emissions occur; |
| Waste management measures | Send to a municipal sewage treatment plant; |
| 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. In addition, this SDS is being provided to convey health and safety information. If you are the importer of record of this product into the European Union, you are responsible for all regulatory requirements, including, but not limited to, product registrations/notifications, substance volume tracking, and potential substance registration.

3M Ireland MSDSs are available at www.3M.com