



Safety Data Sheet

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|------------------------|------------|-------------------------|------------|
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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (1907/2006), as amended for GB.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

3M Scotch-Weld(tm) Clear Primer 9348

Product Identification Numbers

FS-9000-2582-6 UU-0082-7733-5

7000079801 7100132671

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

Identified uses

Adhesive primer

1.3. Details of the supplier of the safety data sheet

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
Telephone: +44 (0)1344 858 000
E Mail: tox.uk@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

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
 Serious Eye Damage/Eye Irritation, Category 2 - Eye Irrit. 2; H319
 Carcinogenicity, Category 2 - Carc. 2; H351
 Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336
 Hazardous to the Aquatic Environment (Chronic), Category 3 - Aquatic Chronic 3; H412

For full text of H phrases, see Section 16.

2.2. Label elements

The retained CLP Regulation (EU) No 1272/2008 as amended for Great Britain

SIGNAL WORD

DANGER.

Symbols

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

Pictograms



| Ingredient | CAS Nbr | EC No. | % by Wt |
|-----------------|----------|-----------|---------|
| acetone | 67-64-1 | 200-662-2 | 30 - 50 |
| butanone | 78-93-3 | 201-159-0 | 30 - 40 |
| tetrahydrofuran | 109-99-9 | 203-726-8 | 1 - 5 |

HAZARD STATEMENTS:

| | |
|------|--|
| H225 | Highly flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H351 | Suspected of causing cancer. |
| H336 | May cause drowsiness or dizziness. |
| H412 | Harmful to aquatic life with long lasting effects. |

PRECAUTIONARY STATEMENTS

Prevention:

| | |
|-------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P261A | Avoid breathing vapours. |
| P280K | Wear protective gloves and respiratory protection. |

Response:

| | |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P370 + P378 | In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish. |

SUPPLEMENTAL INFORMATION:

Supplemental Hazard Statements:

EUH066

Repeated exposure may cause skin dryness or cracking.

13% of the mixture consists of components of unknown acute oral 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], as amended for GB |
|---|---|-----------|---|
| acetone | (CAS-No.) 67-64-1 (EC-No.) 200-662-2 | 30 - 50 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 |
| butanone | (CAS-No.) 78-93-3 (EC-No.) 201-159-0 | 30 - 40 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 |
| Acrylic polymer | Trade Secret | 10 - 15 | Substance not classified as hazardous |
| tetrahydrofuran | (CAS-No.) 109-99-9 (EC-No.) 203-726-8 | 1 - 5 | Flam. Liq. 2, H225 EUH019 Eye Irrit. 2, H319 Carc. 2, H351 STOT SE 3, H335 Acute Tox. 4, H302 STOT SE 3, H336 |
| toluene | (CAS-No.) 108-88-3 (EC-No.) 203-625-9 | < 3 | 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 |
| Resin acids and rosin acids, esters with glycerol | (CAS-No.) 8050-31-5 (EC-No.) 232-482-5 | 0.5 - 1.5 | Substance not classified as hazardous |
| methyl acetate | (CAS-No.) 79-20-9 (EC-No.) 201-185-2 | < 1.5 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 |
| 4-methylpentan-2-one | (CAS-No.) 108-10-1 (EC-No.) 203-550-1 | < 1 | Flam. Liq. 2, H225 Acute Tox. 4, H332(LC50 = 11 mg/l **ATE values per GB MCL**) Eye Irrit. 2, H319 |

| | | | |
|-------------|--|-----|---|
| | | | STOT SE 3, H336 EUH066 Carc. 2, H351 |
| cyclohexane | (CAS-No.) 110-82-7 (EC-No.) 203-806-2 | < 1 | 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 |

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 |
|-----------------|--|---|
| tetrahydrofuran | (CAS-No.) 109-99-9 (EC-No.) 203-726-8 | (C >= 25%) Eye Irrit. 2, H319 (C >= 25%) STOT SE 3, H335 |

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eye contact

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

If swallowed

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

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

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

Dermal defatting (localized redness, itching, drying and cracking of skin). Serious irritation to the eyes (significant redness, swelling, pain, tearing, and impaired vision). Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

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

| <u>Substance</u> | <u>Condition</u> |
|---------------------|--------------------|
| Aldehydes. | During combustion. |
| Hydrocarbons. | During combustion. |
| Carbon monoxide | During combustion. |
| Carbon dioxide. | During combustion. |
| Hydrogen cyanide. | During combustion. |
| Ketones. | During combustion. |
| Oxides of nitrogen. | 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 that is resistant to polar solvents. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a 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

For industrial/occupational use only. Not for consumer sale or use. 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. Avoid release to the environment. 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. 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 | UK HSE | TWA:208 mg/m ³ (50 ppm);STEL:416 mg/m ³ (100 ppm) | SKIN |
| toluene | 108-88-3 | UK HSE | TWA: 191 mg/m ³ (50 ppm); STEL: 384 mg/m ³ (100 ppm) | SKIN |
| tetrahydrofuran | 109-99-9 | UK HSE | TWA: 150 mg/m ³ (50 ppm); STEL: 300 mg/m ³ (100 ppm) | SKIN |
| cyclohexane | 110-82-7 | UK HSE | TWA:350 mg/m ³ (100 ppm);STEL:1050 mg/m ³ (300 ppm) | |
| acetone | 67-64-1 | UK HSE | TWA:1210 mg/m ³ (500 ppm);STEL:3620 mg/m ³ (1500 ppm) | |
| butanone | 78-93-3 | UK HSE | TWA: 600 mg/m ³ (200 ppm); STEL: 899 mg/m ³ (300 ppm) | SKIN |
| methyl acetate | 79-20-9 | UK HSE | TWA:616 mg/m ³ (200 ppm);STEL:770 mg/m ³ (250 ppm) | |

UK HSE : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

| Ingredient | CAS Nbr | Agency | Determinant | Biological Specimen | Sampling Time | Value | Additional comments |
|----------------------|----------|------------------|--------------------------|---------------------|---------------|-----------|---------------------|
| 4-methylpentan-2-one | 108-10-1 | UK EH40 BMGVs | 4-Methyl pentan-2-one | Urine | EOS | 20 umol/L | |
| butanone | 78-93-3 | UK EH40 BMGVs | Butan-2-one | Urine | EOS | 70 umol/L | |

UK EH40 BMGVs : UK. EH40 Biological Monitoring Guidance Values (BMGVs)

EOS: End of shift.

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

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 | >0.30 | =>8 hours |

The glove data presented are based on the substance driving dermal toxicity and the conditions present at the time of testing. Breakthrough time may be altered when the glove is subjected to use conditions that place additional stress on the glove.

Applicable Norms/Standards

Use gloves tested to EN 374

Respiratory protection

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

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

Organic vapor cartridges 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: filter types A & P

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|-------------------------------------|--|
| Physical state | Liquid. |
| Specific Physical Form: | Liquid. |
| Colour | White |
| Odor | Ketones. |
| Odour threshold | <i>No data available.</i> |
| Melting point/freezing point | <i>Not applicable.</i> |
| Boiling point/boiling range | >=56 °C [<i>Details:Acetone boiling point</i>] |
| Flammability | Flammable Liquid: Category 2. |

| | |
|---|--|
| | |
| Flammable Limits(LEL) | <i>No data available.</i> |
| Flammable Limits(UEL) | <i>No data available.</i> |
| Flash point | >=-18 °C [<i>Test Method: Closed Cup</i>] |
| Autoignition temperature | <i>No data available.</i> |
| Decomposition temperature | <i>No data available.</i> |
| pH | <i>substance/mixture is non-soluble (in water)</i> |
| Kinematic Viscosity | 68.5 mm ² /sec [<i>@ 20 °C</i>] |
| Water solubility | <i>No data available.</i> |
| Solubility- non-water | <i>No data available.</i> |
| Partition coefficient: n-octanol/water | <i>No data available.</i> |
| Vapour pressure | <i>No data available.</i> |
| Density | <i>No data available.</i> |
| Relative density | 0.73 - 0.93 [<i>Ref Std: WATER=1</i>] |
| Relative Vapour Density | <i>No data available.</i> |
| Particle Characteristics | <i>Not applicable.</i> |

9.2. Other information

9.2.2 Other safety characteristics

EU Volatile Organic Compounds

No data available.

Evaporation rate

No data available.

Percent volatile

approximately 88

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat.

Sparks and/or flames.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

Substance

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the material classification in Section 2 and/or the ingredient classifications

in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from 3M assessments.

11.1. Information on hazard classes as defined in the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain.

Signs and Symptoms of Exposure

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

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

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

Eye contact

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

Ingestion

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

Additional Health Effects:

Single exposure may cause target organ effects:

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

Prolonged or repeated exposure may cause target organ effects:

Ocular effects: Signs/symptoms may include blurred or significantly impaired vision. Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears. Olfactory effects: Signs/symptoms may include decreased ability to detect odours and complete loss of smell. 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.

Toxicological Data

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

Acute Toxicity

| Name | Route | Species | Value |
|-----------------|-------------------------|---------|--|
| Overall product | Inhalation-Vapour(4 hr) | | No data available; calculated ATE >50 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| acetone | Dermal | Rabbit | LD50 > 15,688 mg/kg |
| acetone | Inhalation- | Rat | LC50 76 mg/l |

| | | | |
|---|-----------------------------|--------|---------------------|
| | Vapour (4 hours) | | |
| acetone | Ingestion | Rat | LD50 5,800 mg/kg |
| butanone | Dermal | Rabbit | LD50 > 8,050 mg/kg |
| butanone | Inhalation-Vapour (4 hours) | Rat | LC50 34.5 mg/l |
| butanone | Ingestion | Rat | LD50 2,737 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 |
| tetrahydrofuran | Dermal | Rat | LD50 > 2,000 mg/kg |
| tetrahydrofuran | Inhalation-Vapour (4 hours) | Rat | LC50 54 mg/l |
| tetrahydrofuran | Ingestion | Rat | LD50 1,650 mg/kg |
| methyl acetate | Dermal | Rat | LD50 > 2,000 mg/kg |
| methyl acetate | Inhalation-Vapour (4 hours) | Rat | LC50 > 49 mg/l |
| methyl acetate | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Resin acids and rosin acids, esters with glycerol | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Resin acids and rosin acids, esters with glycerol | Ingestion | Rat | LD50 > 2,000 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 |
| 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 |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|---|---------|---------------------------|
| acetone | Mouse | Minimal irritation |
| butanone | Rabbit | Minimal irritation |
| toluene | Rabbit | Irritant |
| tetrahydrofuran | Rabbit | Minimal irritation |
| methyl acetate | Rabbit | No significant irritation |
| Resin acids and rosin acids, esters with glycerol | Rabbit | Minimal irritation |
| 4-methylpentan-2-one | Rabbit | Mild irritant |
| cyclohexane | Rabbit | Mild irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|---|---------|-------------------|
| acetone | Rabbit | Severe irritant |
| butanone | Rabbit | Severe irritant |
| toluene | Rabbit | Moderate irritant |
| tetrahydrofuran | Rabbit | Corrosive |
| methyl acetate | Rabbit | Moderate irritant |
| Resin acids and rosin acids, esters with glycerol | Rabbit | Mild irritant |
| 4-methylpentan-2-one | Rabbit | Mild irritant |
| cyclohexane | Rabbit | Mild irritant |

Skin Sensitisation

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

| | | |
|---|------------------|----------------|
| toluene | Guinea pig | Not classified |
| tetrahydrofuran | Human and animal | Not classified |
| methyl acetate | Human | Not classified |
| Resin acids and rosin acids, esters with glycerol | Guinea pig | Not classified |
| 4-methylpentan-2-one | Guinea pig | Not classified |

Respiratory Sensitisation

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

Germ Cell Mutagenicity

| Name | Route | Value |
|---|----------|--|
| acetone | In vivo | Not mutagenic |
| acetone | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| butanone | In Vitro | Not mutagenic |
| toluene | In Vitro | Not mutagenic |
| toluene | In vivo | Not mutagenic |
| tetrahydrofuran | In Vitro | Not mutagenic |
| tetrahydrofuran | In vivo | Not mutagenic |
| methyl acetate | In Vitro | Not mutagenic |
| methyl acetate | In vivo | Not mutagenic |
| Resin acids and rosin acids, esters with glycerol | In Vitro | Not mutagenic |
| 4-methylpentan-2-one | In Vitro | Not mutagenic |
| cyclohexane | In Vitro | Not mutagenic |
| cyclohexane | In vivo | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|----------------------|----------------|-------------------------|--|
| acetone | Not specified. | Multiple animal species | Not carcinogenic |
| butanone | Inhalation | Human | Not carcinogenic |
| 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 |
| tetrahydrofuran | Inhalation | Multiple animal species | Carcinogenic. |
| 4-methylpentan-2-one | Inhalation | Multiple animal species | Carcinogenic. |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|---------|------------|--------------------------------------|---------|-----------------------|----------------------|
| acetone | Ingestion | Not classified for male reproduction | Rat | NOAEL 1,700 mg/kg/day | 13 weeks |
| acetone | Inhalation | Not classified for development | Rat | NOAEL 5.2 mg/l | during organogenesis |

| | | | | | |
|----------------------|------------|--|-------------------------|-----------------------|------------------------|
| butanone | Inhalation | Not classified for development | Rat | LOAEL 8.8 mg/l | during gestation |
| 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 |
| tetrahydrofuran | Ingestion | Not classified for female reproduction | Rat | NOAEL 782 mg/kg/day | 2 generation |
| tetrahydrofuran | Ingestion | Not classified for male reproduction | Rat | NOAEL 782 mg/kg/day | 2 generation |
| tetrahydrofuran | Ingestion | Not classified for development | Rat | NOAEL 305 mg/kg/day | 2 generation |
| tetrahydrofuran | Inhalation | Not classified for development | Mouse | NOAEL 1.8 mg/l | during gestation |
| 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 |
| cyclohexane | Inhalation | Not classified for female reproduction | Rat | NOAEL 24 mg/l | 2 generation |
| 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 |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|----------|------------|-----------------------------------|--|-------------------------|---------------------|------------------------|
| acetone | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| acetone | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| acetone | Inhalation | immune system | Not classified | Human | NOAEL 1.19 mg/l | 6 hours |
| acetone | Inhalation | liver | Not classified | Guinea pig | NOAEL Not available | |
| acetone | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | poisoning and/or abuse |
| butanone | Inhalation | central nervous system depression | May cause drowsiness or dizziness | official classification | NOAEL Not available | |
| butanone | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| butanone | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Professional judgement | NOAEL Not available | |
| butanone | Ingestion | liver | Not classified | Rat | NOAEL Not available | not applicable |
| butanone | Ingestion | kidney and/or bladder | Not classified | Rat | LOAEL 1,080 mg/kg | not applicable |

| | | | | | | |
|----------------------|------------|-----------------------------------|--|------------------------|---------------------|------------------------|
| 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 |
| tetrahydrofuran | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| tetrahydrofuran | Inhalation | respiratory irritation | May cause respiratory irritation | | NOAEL Not available | |
| tetrahydrofuran | Inhalation | respiratory system | Not classified | Rabbit | NOAEL 2.9 mg/l | 4 hours |
| tetrahydrofuran | Ingestion | central nervous system depression | May cause drowsiness or dizziness | Rat | NOAEL 180 mg/kg | not applicable |
| methyl acetate | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human and animal | NOAEL Not available | |
| methyl acetate | Inhalation | respiratory irritation | May cause respiratory irritation | Human and animal | NOAEL Not available | |
| methyl acetate | Inhalation | blindness | Not classified | | NOAEL Not available | |
| methyl acetate | Ingestion | central nervous system depression | May cause drowsiness or dizziness | | NOAEL Not available | |
| 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 |
| 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 | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration |
|---------|------------|-----------------------|----------------|------------|-----------------------|-------------------|
| acetone | Dermal | eyes | Not classified | Guinea pig | NOAEL Not available | 3 weeks |
| acetone | Inhalation | hematopoietic system | Not classified | Human | NOAEL 3 mg/l | 6 weeks |
| acetone | Inhalation | immune system | Not classified | Human | NOAEL 1.19 mg/l | 6 days |
| acetone | Inhalation | kidney and/or bladder | Not classified | Guinea pig | NOAEL 119 mg/l | not available |
| acetone | Inhalation | heart liver | Not classified | Rat | NOAEL 45 mg/l | 8 weeks |
| acetone | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 900 mg/kg/day | 13 weeks |
| acetone | Ingestion | heart | Not classified | Rat | NOAEL 2,500 mg/kg/day | 13 weeks |
| acetone | Ingestion | hematopoietic system | Not classified | Rat | NOAEL 200 mg/kg/day | 13 weeks |

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| | | | | | | |
|-----------------|------------|--|--|-------------------------------|------------------------------|---------------------------|
| acetone | Ingestion | liver | Not classified | Mouse | NOAEL 3,896 mg/kg/day | 14 days |
| acetone | Ingestion | eyes | Not classified | Rat | NOAEL 3,400 mg/kg/day | 13 weeks |
| acetone | Ingestion | respiratory system | Not classified | Rat | NOAEL 2,500 mg/kg/day | 13 weeks |
| acetone | Ingestion | muscles | Not classified | Rat | NOAEL 2,500 mg/kg | 13 weeks |
| acetone | Ingestion | skin bone, teeth, nails, and/or hair | Not classified | Mouse | NOAEL 11,298 mg/kg/day | 13 weeks |
| butanone | Dermal | nervous system | Not classified | Guinea pig | NOAEL Not available | 31 weeks |
| butanone | Inhalation | liver kidney and/or bladder heart endocrine system gastrointestinal tract bone, teeth, nails, and/or hair hematopoietic system immune system muscles | Not classified | Rat | NOAEL 14.7 mg/l | 90 days |
| butanone | Ingestion | liver | Not classified | Rat | NOAEL Not available | 7 days |
| butanone | Ingestion | nervous system | Not classified | Rat | NOAEL 173 mg/kg/day | 90 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 animal species | NOAEL 11.3 mg/l | 15 weeks |
| 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 |
| tetrahydrofuran | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 0.6 mg/l | 12 weeks |

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| | | | | | | |
|---|------------|---|--|-------------------------|-----------------------|-----------|
| tetrahydrofuran | Inhalation | respiratory system | Not classified | Rat | NOAEL 2.9 mg/l | 12 weeks |
| tetrahydrofuran | Inhalation | kidney and/or bladder | Not classified | Rat | NOAEL 0.6 mg/l | 105 weeks |
| tetrahydrofuran | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL Not available | 2 weeks |
| methyl acetate | Inhalation | respiratory system | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1.1 mg/l | 28 days |
| methyl acetate | Inhalation | endocrine system hematopoietic system liver immune system kidney and/or bladder | Not classified | Rat | NOAEL 6.1 mg/l | 28 days |
| Resin acids and rosin acids, esters with glycerol | Ingestion | liver heart skin endocrine system bone, teeth, nails, and/or hair blood bone marrow hematopoietic system immune system muscles nervous system eyes kidney and/or bladder respiratory system | Not classified | Rat | NOAEL 5,000 mg/kg/day | 90 days |
| 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 |
| cyclohexane | Inhalation | liver | Not classified | Rat | NOAEL 24 mg/l | 90 days |
| 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 |

Aspiration Hazard

| Name | Value |
|---------|-------------------|
| toluene | Aspiration hazard |

| | |
|----------------------|--|
| 4-methylpentan-2-one | Some positive data exist, but the data are not sufficient for classification |
| cyclohexane | 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 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 |
|-----------------|--------------|-------------------------------|---|----------|---------------|-------------|
| acetone | 67-64-1 | Algae or other aquatic plants | Experimental | 96 hours | EC50 | 11,493 mg/l |
| acetone | 67-64-1 | Invertebrate | Experimental | 24 hours | LC50 | 2,100 mg/l |
| acetone | 67-64-1 | Rainbow trout | Experimental | 96 hours | LC50 | 5,540 mg/l |
| acetone | 67-64-1 | Water flea | Experimental | 21 days | NOEC | 1,000 mg/l |
| acetone | 67-64-1 | Bacteria | Experimental | 16 hours | NOEC | 1,700 mg/l |
| acetone | 67-64-1 | Redworm | Experimental | 48 hours | LC50 | >100 |
| butanone | 78-93-3 | Fathead minnow | Experimental | 96 hours | LC50 | 2,993 mg/l |
| butanone | 78-93-3 | Green algae | Experimental | 96 hours | ErC50 | 2,029 mg/l |
| butanone | 78-93-3 | Water flea | Experimental | 48 hours | EC50 | 308 mg/l |
| butanone | 78-93-3 | Green algae | Experimental | 96 hours | ErC10 | 1,289 mg/l |
| butanone | 78-93-3 | Water flea | Experimental | 21 days | NOEC | 100 mg/l |
| butanone | 78-93-3 | Bacteria | Experimental | 16 hours | LOEC | 1,150 mg/l |
| Acrylic polymer | Trade Secret | N/A | Data not available or insufficient for classification | N/A | N/A | N/A |
| tetrahydrofuran | 109-99-9 | Activated sludge | Experimental | 3 hours | IC50 | 460 mg/l |
| tetrahydrofuran | 109-99-9 | Fathead minnow | Experimental | 96 hours | LC50 | 2,160 mg/l |
| tetrahydrofuran | 109-99-9 | Water flea | Experimental | 48 hours | LC50 | 3,485 mg/l |
| tetrahydrofuran | 109-99-9 | Fathead minnow | Experimental | 33 days | NOEC | 216 mg/l |
| 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 |

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| | | | | | | |
|---|-----------|------------------|--------------|------------|--------------------------------|------------------------------|
| 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) |
| Resin acids and rosin acids, esters with glycerol | 8050-31-5 | Green algae | Estimated | 72 hours | No tox obs at lmt of water sol | >100 mg/l |
| Resin acids and rosin acids, esters with glycerol | 8050-31-5 | Rainbow trout | Estimated | 96 hours | No tox obs at lmt of water sol | >100 mg/l |
| Resin acids and rosin acids, esters with glycerol | 8050-31-5 | Water flea | Experimental | 48 hours | No tox obs at lmt of water sol | >100 mg/l |
| Resin acids and rosin acids, esters with glycerol | 8050-31-5 | Green algae | Estimated | 72 hours | No tox obs at lmt of water sol | >100 mg/l |
| methyl acetate | 79-20-9 | Green algae | Experimental | 72 hours | ErC50 | >120 mg/l |
| methyl acetate | 79-20-9 | Water flea | Experimental | 48 hours | EC50 | 1,026.7 mg/l |
| methyl acetate | 79-20-9 | Zebra Fish | Experimental | 96 hours | LC50 | 250 mg/l |
| methyl acetate | 79-20-9 | Green algae | Experimental | 72 hours | NOEC | 120 mg/l |
| methyl acetate | 79-20-9 | Bacteria | Experimental | 16 hours | EC50 | 6,000 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 |
| cyclohexane | 110-82-7 | Bacteria | Experimental | 24 hours | IC50 | 97 mg/l |
| 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 |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|----------|---------|-----------|----------|------------|-------------|----------|
|----------|---------|-----------|----------|------------|-------------|----------|

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| | | | | | | |
|---|--------------|--|---------|--------------------------------|----------------------------------|-------------------------------------|
| acetone | 67-64-1 | Experimental Biodegradation | 28 days | BOD | 78 %BOD/ThOD | OECD 301D - Closed bottle test |
| acetone | 67-64-1 | Experimental Photolysis | | Photolytic half-life (in air) | 147 days (t 1/2) | |
| butanone | 78-93-3 | Experimental Biodegradation | 28 days | BOD | 98 %BOD/ThOD | OECD 301D - Closed bottle test |
| Acrylic polymer | Trade Secret | Data not available or insufficient | N/A | N/A | N/A | N/A |
| tetrahydrofuran | 109-99-9 | Experimental Biodegradation | 28 days | BOD | 39 %BOD/ThOD | |
| 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) | |
| Resin acids and rosin acids, esters with glycerol | 8050-31-5 | Experimental Biodegradation | 28 days | CO2 evolution | 0 %CO2 evolution/THCO2 evolution | OECD 301B - Modified sturm or CO2 |
| methyl acetate | 79-20-9 | Experimental Biodegradation | 28 days | BOD | 70 %BOD/ThOD | OECD 301D - Closed bottle test |
| methyl acetate | 79-20-9 | Experimental Aquatic Inherent Biodegrad. | 6 days | Dissolv. Organic Carbon Deplet | >95 %removal of DOC | OECD 302B Zahn-Wellens/EVPA |
| methyl acetate | 79-20-9 | Experimental Photolysis | | Photolytic half-life (in air) | 94 days (t 1/2) | |
| methyl acetate | 79-20-9 | Experimental Hydrolysis | | Hydrolytic half-life | 44 days (t 1/2) | |
| cyclohexane | 110-82-7 | Experimental Biodegradation | 28 days | BOD | 77 %BOD/ThOD | OECD 301F - Manometric respirometry |
| cyclohexane | 110-82-7 | Experimental Photolysis | | Photolytic half-life (in air) | 4.3 days (t 1/2) | |
| 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) | |

12.3 : Bioaccumulative potential

| Material | Cas No. | Test type | Duration | Study Type | Test result | Protocol |
|---|--------------|---|----------|------------------------|-------------|------------------------------|
| acetone | 67-64-1 | Experimental BCF - Other | | Bioaccumulation factor | 0.65 | |
| acetone | 67-64-1 | Experimental Bioconcentration | | Log Kow | -0.24 | |
| butanone | 78-93-3 | Experimental Bioconcentration | | Log Kow | 0.3 | OECD 117 log Kow HPLC method |
| Acrylic polymer | Trade Secret | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| tetrahydrofuran | 109-99-9 | Experimental Bioconcentration | | Log Kow | 0.45 | |
| toluene | 108-88-3 | Experimental BCF - Other | 72 hours | Bioaccumulation factor | 90 | |
| toluene | 108-88-3 | Experimental Bioconcentration | | Log Kow | 2.73 | |
| Resin acids and rosin acids, esters with glycerol | 8050-31-5 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| methyl acetate | 79-20-9 | Experimental Bioconcentration | | Log Kow | 0.18 | |
| cyclohexane | 110-82-7 | Experimental BCF - Fish | 56 days | Bioaccumulation factor | 129 | OECD305-Bioconcentration |
| cyclohexane | 110-82-7 | Experimental Bioconcentration | | Log Kow | 3.44 | |
| 4-methylpentan-2-one | 108-10-1 | Experimental Bioconcentration | | Log Kow | 1.9 | OECD 117 log Kow HPLC method |

12.4. Mobility in soil

| Material | Cas No. | Test type | Study Type | Test result | Protocol |
|---|-----------|-------------------------------|------------|-------------|--------------------------------|
| acetone | 67-64-1 | Modeled Mobility in Soil | Koc | 9.7 l/kg | Episuite™ |
| toluene | 108-88-3 | Experimental Mobility in Soil | Koc | 37-160 l/kg | |
| Resin acids and rosin acids, esters with glycerol | 8050-31-5 | Estimated Mobility in Soil | Koc | >1000 l/kg | Episuite™ |
| methyl acetate | 79-20-9 | Experimental Mobility in Soil | Koc | 1.5 l/kg | OECD 121 Estim. of Koc by HPLC |
| cyclohexane | 110-82-7 | Modeled Mobility in Soil | Koc | 970 l/kg | Episuite™ |
| 4-methylpentan-2-one | 108-10-1 | Modeled Mobility in Soil | Koc | 150 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. Other adverse effects

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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

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

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

EU waste code (product as sold)

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

SECTION 14: Transportation information

| | Ground Transport (ADR) | Air Transport (IATA) | Marine Transport (IMDG) |
|--|---|---|---|
| 14.1 UN number | UN1993 | UN1993 | UN1993 |
| 14.2 UN proper shipping name | FLAMMABLE LIQUID, N.O.S.(METHYL ETHYL KETONE) | FLAMMABLE LIQUID, N.O.S.(METHYL ETHYL KETONE) | FLAMMABLE LIQUID, N.O.S.(METHYL ETHYL KETONE) |
| 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 Transport in bulk according to Annex II of Marpol 73/78 and IBC Code | No data available. | No data available. | No data available. |
| Control Temperature | No data available. | No data available. | No data available. |
| Emergency Temperature | No data available. | No data available. | No data available. |
| ADR 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 Ingredient

| <u>Ingredient</u> | <u>CAS Nbr</u> | <u>Classification</u> | <u>Regulation</u> |
|----------------------|----------------|-------------------------------|--|
| 4-methylpentan-2-one | 108-10-1 | Carc. 2 | Annex VI-17th ATP according to the retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain |
| 4-methylpentan-2-one | 108-10-1 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |
| tetrahydrofuran | 109-99-9 | Carc. 2 | The retained CLP Regulation (EU) No 1272/2008, as amended for Great Britain, UK Mandatory Classification and Labelling list |
| tetrahydrofuran | 109-99-9 | Grp. 2B: Possible human carc. | International Agency for Research on Cancer |
| toluene | 108-88-3 | Gr. 3: Not classifiable | International Agency for Research on Cancer |

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

The following substance(s) contained in this product is/are subject to Annex XVII of regulation (EC) 1907/2006, as amended for GB, with regard to restrictions on the manufacture, placing on the market and use when present in certain dangerous conditions. 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> |
|--------------------------|-----------------------|
| cyclohexane | 110-82-7 |
| toluene | 108-88-3 |

Restriction status: listed in UK REACH Annex XVII

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

Regulation UK regulation 2023/63 (marketing and use of explosive precursors and poisons)

This product contains a reportable substance according to UK legislation 1972/66: all suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point. Please see UK Regulation 2023/63 for further details.

Global inventory status

Contact 3M for more information.

COMAH Regulation, SI 2015/483

Seveso hazard categories, Annex 1, Part 1

| Hazard Categories | Qualifying quantity (tonnes) for the application of | |
|------------------------|---|-------------------------|
| | Lower-tier requirements | Upper-tier requirements |
| 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 |
| acetone | 67-64-1 | 10 | 50 |
| cyclohexane | 110-82-7 | 10 | 50 |
| methyl acetate | 79-20-9 | 10 | 50 |
| butanone | 78-93-3 | 10 | 50 |
| 4-methylpentan-2-one | 108-10-1 | 10 | 50 |
| tetrahydrofuran | 109-99-9 | 10 | 50 |
| toluene | 108-88-3 | 10 | 50 |

Regulation (EU) No 649/2012, as amended for GB

No chemicals listed

15.2. Chemical Safety Assessment

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

SECTION 16: Other information

List of relevant H statements

| | |
|--------|--|
| EUH019 | May form explosive peroxides. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| H225 | Highly flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H351 | Suspected of causing cancer. |
| H361d | Suspected of damaging the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Revision information:

GB Section 04: First Aid - Symptoms and Effects (GB CLP) information was modified.

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

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

Section 8: Respiratory protection - recommended respirators information information was modified.

Section 9: Flammability (solid, gas) information information was deleted.

Section 09: Flammability information information was added.

Section 09: Particle Characteristics N/A information was added.

Section 11: Target Organs - Repeated 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.

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