



Safety Data Sheet

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This Safety Data Sheet has been prepared in accordance with the GHS guidelines & India Hazardous substances (Classification, Labeling & Packaging) Draft Rules 2011.

SECTION 1: Identification

1.1. Product identifier

3M Primer 94

1.2. Recommended use and restrictions on use

Recommended use

Adhesion promoter., Primer

1.3. Supplier's details

Address: 3M India Limited, plot-48-51, Electronic city, Hosur road, Bangalore-560100
Telephone: 080-45543000, contact Product EHS team
E Mail: productehs.in@mmm.com
Website: <http://solutions.3mindia.co.in>

1.4. Emergency telephone number

080-45543000 (Contact hours: 8:00 AM to 5:00 PM)

SECTION 2: Hazard identification

Under MSIHC Rules, information is noted below on flammability, acute toxicity and explosivity relevant to this product. In line with international standards, information on other hazard classes and associated precautionary statements relevant to this product are included as well.

2.1. Classification of the substance or mixture

Flammable Liquid: Category 2.
 Acute Toxicity (dermal): Category 5.
 Acute Toxicity (inhalation): Category 5.
 Serious Eye Damage/Irritation: Category 2A
 Skin Corrosion/Irritation: Category 3.
 Skin Sensitizer: Category 1.
 Aspiration Hazard: Category 1.
 Reproductive Toxicity: Category 1B.
 Carcinogenicity: Category 2.
 Specific Target Organ Toxicity (single exposure): Category 1.
 Specific Target Organ Toxicity (single exposure): Category 3.
 Specific Target Organ Toxicity (repeated exposure): Category 1.

Acute Aquatic Toxicity: Category 1.
Chronic Aquatic Toxicity: Category 3.

2.2. Label elements

Signal Word

DANGER!

Symbols

Flame | Exclamation mark | Health Hazard | Environment |

Pictograms



HAZARD STATEMENTS:

| | |
|------|---|
| H225 | Highly flammable liquid and vapour. |
| H313 | May be harmful in contact with skin. |
| H333 | May be harmful if inhaled. |
| H319 | Causes serious eye irritation. |
| H316 | Causes mild skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H304 | May be fatal if swallowed and enters airways. |
| H336 | May cause drowsiness or dizziness. |
| H360 | May damage fertility or the unborn child. |
| H351 | Suspected of causing cancer. |
| H370 | Causes damage to organs: sensory organs |
| H372 | Causes damage to organs through prolonged or repeated exposure: nervous system sensory organs |
| H400 | Very toxic to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |

PRECAUTIONARY STATEMENTS

Prevention:

| | |
|-------|---|
| P201 | Obtain special instructions before use. |
| P210A | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P280E | Wear protective gloves. |
| P273 | Avoid release to the environment. |

Response:

| | |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P331 | Do NOT induce vomiting. |
| P301 + P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. |
| P308 + P313 | IF exposed or concerned: Get medical advice/attention. |

P370 + P378G

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Disposal:

P501

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

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

This material is a mixture.

| Ingredient | CAS Nbr | % by Wt |
|---|--------------|---------|
| Cyclohexane | 110-82-7 | 40 - 60 |
| Xylene | 1330-20-7 | 15 - 35 |
| Ethylbenzene | 100-41-4 | 5 - 15 |
| Ethanol | 64-17-5 | 5 - 10 |
| Ethyl acetate | 141-78-6 | 1 - 5 |
| Acrylate Polymer (NJTS Reg. No. 04499600-5984P) | Trade Secret | 1 - 5 |
| Chlorinated Polyolefin | 68609-36-9 | < 2 |
| Toluene | 108-88-3 | < 2 |
| Acetone | 67-64-1 | < 1 |
| Propan-2-ol | 67-63-0 | < 1 |
| Epoxy Resin | 25068-38-6 | < 0.5 |
| Methanol | 67-56-1 | < 0.5 |
| 4-Methylpentan-2-one | 108-10-1 | < 0.5 |
| Cumene | 98-82-8 | < 0.2 |
| Chlorobenzene | 108-90-7 | < 0.11 |
| Maleic anhydride | 108-31-6 | < 0.1 |
| Naphthalene | 91-20-3 | < 0.1 |

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

Allergic skin reaction (redness, swelling, blistering, and itching). 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. Target organ effects following prolonged or repeated exposure. 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. Suitable 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. Special protective actions 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 vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors 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 in accordance with applicable local/regional/national/international regulations.

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. 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 vapor 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.

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 |
|----------------------|-----------|--------|--|---|
| Ethylbenzene | 100-41-4 | ACGIH | TWA:20 ppm | A3: Confirmed animal carcin. |
| 4-Methylpentan-2-one | 108-10-1 | ACGIH | TWA:20 ppm;STEL:75 ppm | A3: Confirmed animal carcin. |
| Maleic anhydride | 108-31-6 | ACGIH | TWA(inhalable fraction and vapor):0.01 mg/m3 | A4: Not class. as human carcin, Dermal/Respiratory Sensitizer |
| Toluene | 108-88-3 | ACGIH | TWA:20 ppm | A4: Not class. as human carcin, Ototoxicant |
| Chlorobenzene | 108-90-7 | ACGIH | TWA:10 ppm | A3: Confirmed animal carcin. |
| Cyclohexane | 110-82-7 | ACGIH | TWA:100 ppm | |
| Xylene | 1330-20-7 | ACGIH | TWA:100 ppm;STEL:150 ppm | A4: Not class. as human carcin |
| Ethyl acetate | 141-78-6 | ACGIH | TWA:400 ppm | |
| Ethanol | 64-17-5 | ACGIH | STEL:1000 ppm | A3: Confirmed animal carcin. |
| Methanol | 67-56-1 | ACGIH | TWA:200 ppm;STEL:250 ppm | Danger of cutaneous absorption |
| Propan-2-ol | 67-63-0 | ACGIH | TWA:200 ppm;STEL:400 ppm | A4: Not class. as human carcin |
| Acetone | 67-64-1 | ACGIH | TWA:250 ppm;STEL:500 ppm | A4: Not class. as human carcin |
| Naphthalene | 91-20-3 | ACGIH | TWA:10 ppm | A3: Confirmed animal carcin., Danger of cutaneous absorption |
| Cumene | 98-82-8 | ACGIH | TWA:5 ppm | A3: Confirmed animal carcin. |

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

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

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect vented goggles.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity. Gloves made from the following material(s) are recommended: Polymer laminate

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 vapor respirators may have short service life.

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

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|---|
| Physical state | Liquid. |
| Specific Physical Form: | Liquid. |
| Color | Amber |
| Odor | Solvent |
| Odour threshold | <i>No data available.</i> |
| pH | <i>Not applicable.</i> |
| Melting point/Freezing point: NA | <i>Not applicable.</i> |
| Boiling point/Initial boiling point/Boiling range | 76.7 °C |
| Flash point | -17.2 °C [<i>Test Method: Closed Cup</i>] |
| Evaporation rate | <i>No data available.</i> |

| | |
|--|---|
| Flammability (solid, gas) | Not applicable. |
| Flammable Limits(LEL) | 1 % |
| Flammable Limits(UEL) | 11 % |
| Vapour pressure | 9,065.9 Pa [@ 20 °C] |
| Vapor Density and/or Relative Vapor Density | <i>No data available.</i> |
| Density | 0.82 g/ml |
| Relative density | 0.82 [@ 25 °C] [<i>Ref Std: WATER=1</i>] |
| Water solubility | Negligible |
| Solubility- non-water | <i>No data available.</i> |
| Partition coefficient: n-octanol/water | <i>No data available.</i> |
| Autoignition temperature | <i>No data available.</i> |
| Decomposition temperature | <i>No data available.</i> |
| Viscosity/Kinematic Viscosity | 1 - 35 mPa-s [@ 23 °C] |
| Volatile organic compounds (VOC) | 781 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>] [<i>Details: low solids less exempts</i>] |
| Percent volatile | 95.3 - 97 % weight [<i>Test Method: Estimated</i>] |
| VOC less H2O & exempt solvents | 781 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>] [<i>Details: low solids less exempts</i>] |
| Molecular weight | <i>No data available.</i> |

Nanoparticles

This material does not contain nanoparticles.

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 be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be

relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

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

Inhalation

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 localized 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:

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.

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-Vapor(4 hr) | | No data available; calculated ATE ₂₀ - 50 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE >5,000 mg/kg |
| Cyclohexane | Dermal | Rat | LD50 > 2,000 mg/kg |
| Cyclohexane | Inhalation-Vapor (4 hours) | Rat | LC50 > 32.9 mg/l |
| Cyclohexane | Ingestion | Rat | LD50 6,200 mg/kg |
| Xylene | Dermal | Rabbit | LD50 > 4,200 mg/kg |
| Xylene | Inhalation-Vapor (4 hours) | Rat | LC50 29 mg/l |
| Xylene | Ingestion | Rat | LD50 3,523 mg/kg |
| Ethylbenzene | Dermal | Rabbit | LD50 15,433 mg/kg |
| Ethylbenzene | Inhalation-Vapor (4 hours) | Rat | LC50 17.4 mg/l |
| Ethylbenzene | Ingestion | Rat | LD50 4,769 mg/kg |
| Ethanol | Dermal | Rabbit | LD50 > 15,800 mg/kg |
| Ethanol | Inhalation-Vapor (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-Vapor (4 hours) | Rat | LC50 70.5 mg/l |
| Ethyl acetate | Ingestion | Rat | LD50 5,620 mg/kg |
| Toluene | Dermal | Rat | LD50 12,000 mg/kg |
| Toluene | Inhalation-Vapor (4 hours) | Rat | LC50 30 mg/l |
| Toluene | Ingestion | Rat | LD50 5,550 mg/kg |
| Chlorinated Polyolefin | Dermal | Guinea pig | LD50 > 1,000 mg/kg |
| Chlorinated Polyolefin | Ingestion | Rat | LD50 > 3,200 mg/kg |
| Acetone | Dermal | Rabbit | LD50 > 15,688 mg/kg |
| Acetone | Inhalation-Vapor (4 hours) | Rat | LC50 76 mg/l |
| Acetone | Ingestion | Rat | LD50 5,800 mg/kg |
| Propan-2-ol | Dermal | Rabbit | LD50 12,870 mg/kg |
| Propan-2-ol | Inhalation-Vapor (4 hours) | Rat | LC50 72.6 mg/l |
| Propan-2-ol | Ingestion | Rat | LD50 4,710 mg/kg |
| 4-Methylpentan-2-one | Dermal | Rabbit | LD50 > 16,000 mg/kg |
| 4-Methylpentan-2-one | Inhalation-Vapor (4 hours) | Rat | LC50 >8.2,<16.4 mg/l |
| 4-Methylpentan-2-one | Ingestion | Rat | LD50 3,038 mg/kg |
| Methanol | Dermal | | LD50 estimated to be 1,000 - 2,000 mg/kg |
| Methanol | Inhalation-Vapor | | LC50 estimated to be 10 - 20 mg/l |
| Methanol | Ingestion | | LD50 estimated to be 50 - 300 mg/kg |
| Epoxy Resin | Dermal | Rat | LD50 > 1,600 mg/kg |
| Epoxy Resin | Ingestion | Rat | LD50 > 1,000 mg/kg |
| Cumene | Dermal | Rabbit | LD50 > 3,160 mg/kg |
| Cumene | Inhalation-Vapor (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-Vapor (4 hours) | Rat | LC50 16.7 mg/l |
| Chlorobenzene | Ingestion | Rat | LD50 1,419 mg/kg |
| Naphthalene | Dermal | Human | LD50 estimated to be 2,000 - 5,000 mg/kg |
| Naphthalene | Inhalation-Vapor | Human | LC50 estimated to be 20 - 50 mg/l |
| Naphthalene | Ingestion | Human | LD50 estimated to be 300 - 2,000 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 |
|------------------------|-------------------------|---------------------------|
| Cyclohexane | Rabbit | Mild irritant |
| Xylene | Rabbit | Mild irritant |
| Ethylbenzene | Rabbit | Mild irritant |
| Ethanol | Rabbit | No significant irritation |
| Ethyl acetate | Rabbit | Minimal irritation |
| Toluene | Rabbit | Irritant |
| Chlorinated Polyolefin | Guinea pig | No significant irritation |
| Acetone | Mouse | Minimal irritation |
| Propan-2-ol | Multiple animal species | No significant irritation |
| 4-Methylpentan-2-one | Rabbit | Mild irritant |
| Methanol | Rabbit | Mild irritant |
| Epoxy Resin | Rabbit | Mild irritant |
| Cumene | Rabbit | Minimal irritation |
| Chlorobenzene | Rabbit | Irritant |
| Naphthalene | Rabbit | Minimal irritation |
| Maleic anhydride | Human and animal | Corrosive |

Serious Eye Damage/Irritation

| Name | Species | Value |
|------------------------|------------------------|---------------------------|
| Cyclohexane | Rabbit | Mild irritant |
| Xylene | Rabbit | Mild irritant |
| Ethylbenzene | Rabbit | Moderate irritant |
| Ethanol | Rabbit | Severe irritant |
| Ethyl acetate | Rabbit | Mild irritant |
| Toluene | Rabbit | Moderate irritant |
| Chlorinated Polyolefin | Professional judgement | Mild irritant |
| Acetone | Rabbit | Severe irritant |
| Propan-2-ol | Rabbit | Severe irritant |
| 4-Methylpentan-2-one | Rabbit | Mild irritant |
| Methanol | Rabbit | Moderate irritant |
| Epoxy Resin | Rabbit | Moderate irritant |
| Cumene | Rabbit | Mild irritant |
| Chlorobenzene | Rabbit | Mild irritant |
| Naphthalene | Rabbit | No significant irritation |
| Maleic anhydride | Rabbit | Corrosive |

Sensitization:

Skin Sensitisation

| Name | Species | Value |
|----------------------|-------------------------|----------------|
| Ethylbenzene | Human | Not classified |
| Ethanol | Human | Not classified |
| Ethyl acetate | Guinea pig | Not classified |
| Toluene | Guinea pig | Not classified |
| Propan-2-ol | Guinea pig | Not classified |
| 4-Methylpentan-2-one | Guinea pig | Not classified |
| Methanol | Guinea pig | Not classified |
| Epoxy Resin | Human and animal | Sensitising |
| Cumene | Guinea pig | Not classified |
| Chlorobenzene | Multiple animal species | Not classified |
| Maleic anhydride | Multiple animal species | Sensitising |

Respiratory Sensitisation

| Name | Species | Value |
|------------------|---------|----------------|
| Epoxy Resin | Human | Not classified |
| Maleic anhydride | Human | Sensitising |

Germ Cell Mutagenicity

| Name | Route | Value |
|----------------------|----------|--|
| Cyclohexane | In Vitro | Not mutagenic |
| Cyclohexane | In vivo | Some positive data exist, but the data are not sufficient for classification |
| Xylene | In Vitro | Not mutagenic |
| Xylene | In vivo | Not mutagenic |
| Ethylbenzene | In vivo | Not mutagenic |
| Ethylbenzene | In Vitro | 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 |
| Toluene | In Vitro | Not mutagenic |
| Toluene | In vivo | Not mutagenic |
| Acetone | In vivo | Not mutagenic |
| Acetone | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Propan-2-ol | In Vitro | Not mutagenic |
| Propan-2-ol | In vivo | Not mutagenic |
| 4-Methylpentan-2-one | In Vitro | Not mutagenic |
| Methanol | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| Methanol | In vivo | Some positive data exist, but the data are not sufficient for classification |
| Epoxy Resin | In vivo | Not mutagenic |
| Epoxy Resin | In Vitro | Some positive data exist, but the data are not sufficient for classification |

| | | |
|------------------|----------|--|
| 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 |
| Ethylbenzene | Inhalation | Multiple animal species | Carcinogenic. |
| Ethanol | Ingestion | Multiple animal species | 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 |
| Acetone | Not specified. | Multiple animal species | Not carcinogenic |
| Propan-2-ol | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| 4-Methylpentan-2-one | Inhalation | Multiple animal species | Carcinogenic. |
| Methanol | Inhalation | Multiple animal species | Not carcinogenic |
| Epoxy Resin | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification |
| Cumene | Inhalation | Multiple animal species | Carcinogenic. |
| Chlorobenzene | Ingestion | Multiple animal species | Not carcinogenic |
| Naphthalene | Inhalation | Multiple animal species | Carcinogenic. |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration |
|-------------|------------|--|----------|---------------------|-----------------------|
| 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 |
| 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 | NOAEL Not | during |

| | | | animal species | available | gestation |
|----------------------|------------|--|-------------------------|-----------------------|--------------------------------|
| Ethylbenzene | Inhalation | Not classified for development | Rat | NOAEL 4.3 mg/l | prematuring & during gestation |
| 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 | prematuring & 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 |
| 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 |
| Propan-2-ol | Ingestion | Not classified for development | Rat | NOAEL 400 mg/kg/day | during organogenesis |
| Propan-2-ol | Inhalation | Not classified for development | Rat | LOAEL 9 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 |
| 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 |
| Epoxy Resin | Ingestion | Not classified for female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Epoxy Resin | Ingestion | Not classified for male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation |
| Epoxy Resin | Dermal | Not classified for development | Rabbit | NOAEL 300 mg/kg/day | during organogenesis |
| Epoxy Resin | Ingestion | Not classified for development | Rat | NOAEL 750 mg/kg/day | 2 generation |
| 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 | 2 generation |

| | | | | | |
|------------------|-----------|--------------------------------|-----|-------------------------------------|-------------------------|
| Maleic anhydride | Ingestion | Not classified for development | Rat | mg/kg/day 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 |
|---------------|------------|-----------------------------------|--|-------------------------|---------------------|-------------------|
| 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 | |
| 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 |
| Ethylbenzene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| Ethylbenzene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human and animal | 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 | |
| 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 |
| 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 |
| Propan-2-ol | Inhalation | central nervous system depression | May cause drowsiness or dizziness | Human | NOAEL Not available | |
| Propan-2-ol | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Human | NOAEL Not available | |
| Propan-2-ol | Inhalation | auditory system | Not classified | Guinea pig | NOAEL 13.4 mg/l | 24 hours |
| Propan-2-ol | 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 | May cause respiratory irritation | Human | NOAEL 0.9 mg/l | 7 minutes |
| 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 |
| 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 |
| 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 |
| Naphthalene | Ingestion | blood | Causes damage to organs | Human | NOAEL Not available | poisoning and/or abuse |
| 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 |
|------|-------|-----------------|-------|---------|-------------|-------------------|
|------|-------|-----------------|-------|---------|-------------|-------------------|

| | | | | | | |
|--------------|------------|--|--|-------------------------|-----------------------|-----------|
| 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 |
| 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 through 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 |
| Ethylbenzene | Inhalation | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1.1 mg/l | 2 years |
| Ethylbenzene | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | Mouse | NOAEL 1.1 mg/l | 103 weeks |
| Ethylbenzene | Inhalation | hematopoietic system | Not classified | Rat | NOAEL 3.4 mg/l | 28 days |
| Ethylbenzene | Inhalation | auditory system | Not classified | Rat | NOAEL 2.4 mg/l | 5 days |
| Ethylbenzene | Inhalation | endocrine system | Not classified | Mouse | NOAEL 3.3 mg/l | 103 weeks |
| Ethylbenzene | Inhalation | gastrointestinal tract | Not classified | Rat | NOAEL 3.3 mg/l | 2 years |
| Ethylbenzene | Inhalation | bone, teeth, nails, and/or hair muscles | Not classified | Multiple animal species | NOAEL 4.2 mg/l | 90 days |
| Ethylbenzene | Inhalation | heart immune system respiratory system | Not classified | Multiple animal species | NOAEL 3.3 mg/l | 2 years |
| Ethylbenzene | Ingestion | liver kidney and/or bladder | Not classified | Rat | NOAEL 680 mg/kg/day | 6 months |
| 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 |
| Toluene | Inhalation | auditory system eyes olfactory system | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Toluene | Inhalation | nervous system | May cause damage to organs though 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 |
| 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 |
| 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 |
| Propan-2-ol | Inhalation | kidney and/or bladder | Not classified | Rat | NOAEL 12.3 mg/l | 24 months |
| Propan-2-ol | Inhalation | nervous system | Not classified | Rat | NOAEL 12 mg/l | 13 weeks |
| Propan-2-ol | Ingestion | kidney and/or bladder | Not classified | Rat | NOAEL 400 mg/kg/day | 12 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 |
| 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 |
| Epoxy Resin | Dermal | liver | Not classified | Rat | NOAEL 1,000 mg/kg/day | 2 years |
| Epoxy Resin | Dermal | nervous system | Not classified | Rat | NOAEL 1,000 mg/kg/day | 13 weeks |
| Epoxy Resin | Ingestion | auditory system heart endocrine system hematopoietic | Not classified | Rat | NOAEL 1,000 mg/kg/day | 28 days |

| | | | | | | |
|------------------|------------|---|--|--------|---------------------|------------------------|
| | | system liver eyes kidney and/or bladder | | | | |
| 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 classification | Rat | NOAEL 250 mg/kg/day | 13 weeks |
| 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 |
| Naphthalene | Dermal | blood | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Naphthalene | Dermal | eyes | Not classified | Human | NOAEL Not available | occupational exposure |
| Naphthalene | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.01 mg/l | 13 weeks |
| Naphthalene | Inhalation | blood | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Naphthalene | Inhalation | eyes | Not classified | Human | NOAEL Not available | occupational exposure |
| Naphthalene | Ingestion | blood | Causes damage to organs through prolonged or repeated exposure | Human | NOAEL Not available | poisoning and/or abuse |
| Naphthalene | Ingestion | eyes | May cause damage to organs though prolonged or repeated exposure | Rabbit | LOAEL 500 mg/kg/day | 15 days |
| 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 |
|----------------------|--|
| Cyclohexane | Aspiration hazard |
| Xylene | Aspiration hazard |
| Ethylbenzene | 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.

SECTION 12: Ecological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

Acute aquatic hazard:

GHS Acute 1: Very toxic to aquatic life.

Chronic aquatic hazard:

GHS Chronic 3: Harmful to aquatic life with long lasting effects.

No product test data available.

| Material | CAS Nbr | Organism | Type | Exposure | Test endpoint | Test result |
|--------------|-----------|------------------|--------------|----------|---------------|-------------|
| 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 | Rainbow trout | Estimated | 56 days | NOEC | >1.3 mg/l |
| Xylene | 1330-20-7 | Water flea | Estimated | 7 days | NOEC | 0.96 mg/l |
| Ethylbenzene | 100-41-4 | Green Algae | Estimated | 73 hours | EC50 | 4.36 mg/l |
| Ethylbenzene | 100-41-4 | Rainbow trout | Estimated | 96 hours | LC50 | 2.6 mg/l |
| Ethylbenzene | 100-41-4 | Water flea | Estimated | 48 hours | EC50 | 3.82 mg/l |
| Ethylbenzene | 100-41-4 | Activated | Experimental | 49 hours | EC50 | 130 mg/l |

| | | | | | | |
|---|--------------|------------------|---|----------|-------|------------------------------|
| | | sludge | | | | |
| Ethylbenzene | 100-41-4 | Green Algae | Estimated | 73 hours | NOEC | 0.44 mg/l |
| Ethylbenzene | 100-41-4 | Rainbow trout | Estimated | 56 days | NOEC | >1.3 mg/l |
| Ethylbenzene | 100-41-4 | Water flea | Estimated | 7 days | NOEC | 0.96 mg/l |
| Ethanol | 64-17-5 | Fathead minnow | Experimental | 96 hours | LC50 | 14,200 mg/l |
| Ethanol | 64-17-5 | Fish other | 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 (NJTS Reg. No. 04499600-5984P) | Trade Secret | | Data not available or insufficient for classification | | | N/A |
| Ethyl acetate | 141-78-6 | Bacteria | Experimental | 18 hours | EC10 | 2,900 mg/l |
| Ethyl acetate | 141-78-6 | Crustacea | Experimental | 48 hours | EC50 | 165 mg/l |
| Ethyl acetate | 141-78-6 | Fish | Experimental | 96 hours | LC50 | 212.5 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 |
| Chlorinated Polyolefin | 68609-36-9 | | Data not available or insufficient for classification | | | N/A |
| 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) |
| Acetone | 67-64-1 | Algae other | Experimental | 96 hours | EC50 | 11,493 mg/l |
| Acetone | 67-64-1 | Crustacea other | 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 |
| Propan-2-ol | 67-63-0 | Bacteria | Experimental | 16 hours | LOEC | 1,050 mg/l |
| Propan-2-ol | 67-63-0 | Crustacea | Experimental | 24 hours | LC50 | >10,000 mg/l |
| Propan-2-ol | 67-63-0 | Green Algae | Experimental | 72 hours | EC50 | >1,000 mg/l |
| Propan-2-ol | 67-63-0 | Medaka | Experimental | 96 hours | LC50 | >100 mg/l |
| Propan-2-ol | 67-63-0 | Water flea | Experimental | 48 hours | EC50 | >1,000 mg/l |

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|----------------------|------------|-------------------------------|--------------|------------|------|-------------|
| Propan-2-ol | 67-63-0 | Green algae | Experimental | 72 hours | NOEC | 1,000 mg/l |
| Propan-2-ol | 67-63-0 | Water flea | Experimental | 21 days | NOEC | 100 mg/l |
| Epoxy Resin | 25068-38-6 | Activated sludge | Estimated | 3 hours | IC50 | >100 mg/l |
| Epoxy Resin | 25068-38-6 | Green Algae | Estimated | 72 hours | EC50 | >11 mg/l |
| Epoxy Resin | 25068-38-6 | Rainbow trout | Estimated | 96 hours | LC50 | 2 mg/l |
| Epoxy Resin | 25068-38-6 | Water flea | Estimated | 48 hours | EC50 | 1.8 mg/l |
| Epoxy Resin | 25068-38-6 | Green Algae | Estimated | 72 hours | NOEC | 4.2 mg/l |
| Epoxy Resin | 25068-38-6 | Water flea | Estimated | 21 days | NOEC | 0.3 mg/l |
| Methanol | 67-56-1 | Activated sludge | Experimental | 3 hours | IC50 | >1,000 mg/l |
| Methanol | 67-56-1 | Algae or other aquatic plants | Experimental | 96 hours | EC50 | 16.9 mg/l |
| Methanol | 67-56-1 | Bluegill | Experimental | 96 hours | LC50 | 15,400 mg/l |
| Methanol | 67-56-1 | Green Algae | Experimental | 96 hours | EC50 | 22,000 mg/l |
| Methanol | 67-56-1 | Water flea | Experimental | 24 hours | EC50 | 20,803 mg/l |
| Methanol | 67-56-1 | Algae or other aquatic plants | Experimental | 96 hours | NOEC | 9.96 mg/l |
| Methanol | 67-56-1 | Water flea | Experimental | 21 days | NOEC | 122 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 |
| 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 | Bacteria | Experimental | 24 hours | IC50 | 0.71 mg/l |
| Chlorobenzene | 108-90-7 | Fish other | Experimental | 84 hours | LC50 | 0.34 mg/l |
| Chlorobenzene | 108-90-7 | Green Algae | Experimental | 96 hours | EC50 | 12.5 mg/l |
| Chlorobenzene | 108-90-7 | Water flea | Experimental | 48 hours | EC50 | 0.59 mg/l |
| Chlorobenzene | 108-90-7 | Water flea | Experimental | 21 days | NOEC | 0.72 mg/l |
| Chlorobenzene | 108-90-7 | Zebra Fish | Experimental | 28 days | NOEC | 8.5 mg/l |
| Maleic anhydride | 108-31-6 | Green algae | Estimated | 72 hours | EC50 | 74.4 mg/l |

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|------------------|----------|---------------|--------------|----------|------|-----------|
| Maleic anhydride | 108-31-6 | Water flea | Estimated | 48 hours | EC50 | 93.8 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 | Estimated | 72 hours | EC10 | 11.8 mg/l |
| Maleic anhydride | 108-31-6 | Water flea | Experimental | 21 days | NOEC | 10 mg/l |
| Naphthalene | 91-20-3 | Bacteria | Experimental | 18 hours | EC10 | >20 mg/l |
| Naphthalene | 91-20-3 | Bacteria | Experimental | 24 hours | IC50 | 29 mg/l |
| Naphthalene | 91-20-3 | Diatom | Experimental | 72 hours | EC50 | 0.4 mg/l |
| Naphthalene | 91-20-3 | Rainbow trout | Experimental | 96 hours | LC50 | 0.11 mg/l |
| Naphthalene | 91-20-3 | Water flea | Experimental | 48 hours | EC50 | 1.6 mg/l |
| Naphthalene | 91-20-3 | Fish other | Experimental | 40 days | NOEC | 0.12 mg/l |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|--------------|---------------------------------|----------|-------------------------------|-------------------|-------------------------------------|
| Cyclohexane | 110-82-7 | Experimental Photolysis | | Photolytic half-life (in air) | 4.14 days (t 1/2) | Non-standard method |
| Cyclohexane | 110-82-7 | Experimental Biodegradation | 28 days | BOD | 77 % BOD/ThBOD | OECD 301F - Manometric respirometry |
| Xylene | 1330-20-7 | Experimental Photolysis | | Photolytic half-life (in air) | 1.4 days (t 1/2) | Non-standard method |
| Xylene | 1330-20-7 | Experimental Biodegradation | 28 days | BOD | 90-98 % BOD/ThBOD | OECD 301F - Manometric respirometry |
| Ethylbenzene | 100-41-4 | Experimental Biodegradation | 28 days | BOD | 90-98 % BOD/ThBOD | OECD 301F - Manometric respirometry |
| Ethanol | 64-17-5 | Experimental Biodegradation | 14 days | BOD | 89 % BOD/ThBOD | OECD 301C - MITI test (I) |
| Acrylate Polymer (NJTS Reg. No. 04499600-5984P) | Trade Secret | Data not available-insufficient | | | N/A | |
| Ethyl acetate | 141-78-6 | Experimental Photolysis | | Photolytic half-life (in air) | 20.0 days (t 1/2) | Non-standard method |
| Ethyl acetate | 141-78-6 | Experimental Biodegradation | 14 days | BOD | 94 % BOD/ThBOD | OECD 301C - MITI test (I) |
| Chlorinated Polyolefin | 68609-36-9 | Data not available-insufficient | | | n/a | |
| Toluene | 108-88-3 | Experimental Photolysis | | Photolytic half-life (in air) | 5.2 days (t 1/2) | |
| Toluene | 108-88-3 | Experimental Biodegradation | 20 days | BOD | 80 % BOD/ThBOD | APHA Std Meth Water/Wastewater |
| Acetone | 67-64-1 | Experimental Photolysis | | Photolytic half-life (in air) | 147 days (t 1/2) | |
| Acetone | 67-64-1 | Experimental | 28 days | BOD | 78 % | OECD 301D - Closed |

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|----------------------|------------|-----------------------------|---------|-------------------------------|--------------------|-------------------------------------|
| | | Biodegradation | | | BOD/ThBOD | bottle test |
| Propan-2-ol | 67-63-0 | Experimental Biodegradation | 14 days | BOD | 86 % BOD/ThBOD | OECD 301C - MITI test (I) |
| Epoxy Resin | 25068-38-6 | Estimated Hydrolysis | | Hydrolytic half-life | 117 hours (t 1/2) | Non-standard method |
| Epoxy Resin | 25068-38-6 | Estimated Biodegradation | 28 days | BOD | 5 %BOD/COD | OECD 301F - Manometric respirometry |
| Methanol | 67-56-1 | Experimental Biodegradation | 14 days | BOD | 92 % BOD/ThBOD | OECD 301C - MITI test (I) |
| 4-Methylpentan-2-one | 108-10-1 | Experimental Photolysis | | Photolytic half-life (in air) | 2.3 days (t 1/2) | |
| 4-Methylpentan-2-one | 108-10-1 | Experimental Biodegradation | 28 days | BOD | 83 % BOD/ThBOD | OECD 301F - Manometric respirometry |
| Cumene | 98-82-8 | Experimental Photolysis | | Photolytic half-life (in air) | 4.5 days (t 1/2) | Non-standard method |
| Cumene | 98-82-8 | Experimental Biodegradation | 14 days | BOD | 33 % BOD/ThBOD | OECD 301C - MITI test (I) |
| Chlorobenzene | 108-90-7 | Experimental Photolysis | | Photolytic half-life (in air) | 42 days (t 1/2) | Non-standard method |
| Chlorobenzene | 108-90-7 | Experimental Biodegradation | 20 days | BOD | 55 % weight | OECD 301D - Closed bottle test |
| Maleic anhydride | 108-31-6 | Experimental Hydrolysis | | Hydrolytic half-life | 22 seconds (t 1/2) | Non-standard method |
| Maleic anhydride | 108-31-6 | Estimated Biodegradation | 25 days | CO2 evolution | >90 % weight | OECD 301B - Modified sturm or CO2 |
| Naphthalene | 91-20-3 | Experimental Biodegradation | 28 days | BOD | >74 % BOD/ThBOD | OECD 301C - MITI test (I) |

12.3 : Bioaccumulative potential

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|--------------|---|----------|------------------------|-------------|--|
| Cyclohexane | 110-82-7 | Experimental BCF-Carp | 56 days | Bioaccumulation factor | 129 | OECD 305E - Bioaccumulation flow-through fish test |
| Xylene | 1330-20-7 | Experimental BCF - Rainbow Trout | 56 days | Bioaccumulation factor | 25.9 | Non-standard method |
| Ethylbenzene | 100-41-4 | Experimental BCF - Rainbow Trout | 56 days | Bioaccumulation factor | 25.9 | Non-standard method |
| Ethanol | 64-17-5 | Experimental Bioconcentration | | Log Kow | -0.35 | Non-standard method |
| Acrylate Polymer (NJTS Reg. No. 04499600-5984P) | Trade Secret | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Ethyl acetate | 141-78-6 | Experimental Bioconcentration | | Log Kow | 0.68 | Non-standard method |

| | | | | | | |
|------------------------|------------|---|----------|------------------------|----------|--|
| Chlorinated Polyolefin | 68609-36-9 | Data not available or insufficient for classification | N/A | N/A | N/A | N/A |
| Toluene | 108-88-3 | Experimental BCF - Other | 72 hours | Bioaccumulation factor | 90 | |
| Toluene | 108-88-3 | Experimental Bioconcentration | | Log Kow | 2.73 | |
| Acetone | 67-64-1 | Experimental BCF - Other | | Bioaccumulation factor | 0.65 | |
| Acetone | 67-64-1 | Experimental Bioconcentration | | Log Kow | -0.24 | |
| Propan-2-ol | 67-63-0 | Experimental Bioconcentration | | Log Kow | 0.05 | Non-standard method |
| Epoxy Resin | 25068-38-6 | Estimated Bioconcentration | | Log Kow | 3.242 | Non-standard method |
| Methanol | 67-56-1 | Experimental Bioconcentration | | Log Kow | -0.77 | Non-standard method |
| 4-Methylpentan-2-one | 108-10-1 | Experimental Bioconcentration | | Log Kow | 1.9 | OECD 117 log Kow HPLC method |
| Cumene | 98-82-8 | Estimated Bioconcentration | | Bioaccumulation factor | 140 | Non-standard method |
| Chlorobenzene | 108-90-7 | Experimental BCF-Carp | 56 days | Bioaccumulation factor | 39.6 | OECD 305E - Bioaccumulation flow-through fish test |
| Maleic anhydride | 108-31-6 | Experimental Bioconcentration | | Log Kow | -2.61 | Non-standard method |
| Naphthalene | 91-20-3 | Experimental BCF-Carp | 56 days | Bioaccumulation factor | 36.5-168 | OECD 305E - Bioaccumulation flow-through fish test |

12.4. Mobility in soil

Please contact manufacturer for more details

12.5 Other Adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Disposal 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.

SECTION 14: Transport Information

Air Transport (IATA) Regulations

UN No UN1993

Proper Shipping Name FLAMMABLE LIQUID, N.O.S. (CYCLOHEXANE, XYLENE)

Hazard Class/Division 3

Subsidiary Risk Not applicable

Packing Group: II

Marine Transport (IMDG)

UN No UN1993

Proper Shipping Name FLAMMABLE LIQUID, N.O.S. (CYCLOHEXANE, XYLENE)

Hazard Class/Division 3

Subsidiary Risk Not applicable

Packing Group: II

Environmental Hazards: Marine Pollutant: Yes

SECTION 15: Regulatory information

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

Global inventory status

Contact 3M for more information. 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.

Applicable Environmental, Health and Safety Regulations

The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989

Hazardous Waste (Management, Handling & Transboundary) Rules, 2008

Hazardous Chemicals (Classification, Packaging and Labelling Draft Rules), 2011

The following ingredients are listed as hazardous on Part II of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules

Acetone

Benzene, chloro-

CHLORINATED BENZENES

Chlorobenzene

Cumene

Cyclohexane

Ethyl acetate

Ethanol

Ethylbenzene

Propan-2-ol

Maleic anhydride

Methanol

4-Methylpentan-2-one

Naphthalene

Toluene

The following ingredients are classified as hazardous based on the criteria listed under Part I of Schedule I of the India Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) rules:

The product is classified as Very Highly Flammable Liquid as per MSIHC Rules,1989.

SECTION 16: Other information

NFPA Hazard Classification

Health: 2 **Flammability:** 3 **Instability:** 0 **Special Hazards:** None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision information:

Section 1: Product identification numbers information was deleted.
Section 2: Ingredient table 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: 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.
Prints No Data if Adverse effects information is not present information was added.
Section 12: Persistence and Degradability information information was modified.
Section 12:Biocumulative potential information information was modified.
Section 14: Environmental hazards information was modified.
Section 15: MSIHC Ingredients information was modified.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M India SDSs are available at <http://solutions.3mindia.co.in>