



Safety Data Sheet

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|---------------------------------------|-------------------|-------------------------|------------|
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This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

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

1.1. Product identifier

3M Scotchkote Epoxy Coating EP2306HF (70), Red Oxide (Part A)

Product identification numbers

GR-2001-3331-6 GR-2001-3332-4

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

Identified uses

Coating.

1.3. Details of the supplier of the substance or mixture

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.

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

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Indication of danger

Dangerous to environment.

Irritant.

Flammable

Sensitising

2.2. Label elements

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

3M Scotchkote Epoxy Coating EP2306HF (70), Red Oxide (Part A)**Symbols**

| | |
|----|---------------------------|
| Xi | Irritant. |
| N | Dangerous to environment. |

Contains:

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane; 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers

Risk phrases

| | |
|--------|---|
| R10 | Flammable. |
| R36/38 | Irritating to eyes and skin. |
| R43 | May cause sensitisation by skin contact. |
| R51/53 | Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. |

Safety phrases

| | |
|-----|---|
| S24 | Avoid contact with skin. |
| S37 | Wear suitable gloves. |
| S61 | Avoid release to the environment. Refer to special instructions/safety data sheets. |

Special provisions concerning the labelling of certain substances

Contains epoxy resins. See information supplied by manufacturer.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

| Ingredient | CAS Nbr | EU Inventory | % by Wt | Classification |
|---|------------|------------------|---------|---|
| Non-hazardous ingredients | Mixture | | 10 - 30 | |
| diiron trioxide | 1309-37-1 | EINECS 215-168-2 | 10 - 20 | Acute Tox. 4, H332; STOT RE 1, H372 (Self Classified) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 25068-38-6 | NLP 500-033-5 | 20 - 30 | Xi:R36-38; N:R51/53; R43 (EU) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 2, H411 (CLP) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | 67989-52-0 | NLP 500-180-5 | 5 - 15 | Xi:R36-38; R43 (Vendor) R53 (Self Classified) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 (Vendor) Aquatic Chronic 2, H413 (Self Classified) |
| 1-Methoxypropan-2-ol | 107-98-2 | EINECS 203-539-1 | 5 - 10 | R10; R67 (EU) Flam. Liq. 3, H226; STOT SE 3, H336 (CLP) |
| Quartz | 14808-60-7 | EINECS 238-878-4 | 5 - 10 | Xn:R48/20 (Vendor) STOT RE 1, H372 (Self Classified) |
| N-Butyl Acetate | 123-86-4 | EINECS 204- | 5 - 10 | R10; R66; R67 (EU) |

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| | | | | |
|--------|-----------|------------------|-------|--|
| | | 658-1 | | Flam. Liq. 3, H226; STOT SE 3, H336 (CLP) |
| Xylene | 1330-20-7 | EINECS 215-535-7 | 1 - 5 | Xn:R20-21; Xi:R38; R10 - Nota C (EU) Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315 - Nota C (CLP) |

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

Please refer to section 15 for the any applicable Notas that have been applied to the above components

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****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.

Skin contact

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

Inhalation

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

If swallowed

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

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

See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures**5.1. Extinguishing media**

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

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**

Carbon monoxide.

Carbon dioxide.

Condition

During combustion.

During combustion.

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and

3M Scotchkote Epoxy Coating EP2306HF (70), Red Oxide (Part A)

prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Evacuate area. Eliminate all ignition sources if safe to do so. 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. Collect as much of the spilled material as possible using non-sparking tools. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR-AFFF type foam is recommended. 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 toxic, corrosivity or flammability hazard. 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. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Do not use in a confined area or areas with little or no air movement. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting/equipment. 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. Vapours may travel long distances along the ground or floor to an ignition source and flash back.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from acids. Store away from oxidising agents. Store away from strong bases.

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

3M Scotchkote Epoxy Coating EP2306HF (70), Red Oxide (Part A)

Occupational exposure limits

| Ingredient | CAS Nbr | Agency | Limit type | Additional comments |
|---|------------|------------------------------|--|---------------------|
| 1-Methoxypropan-2-ol | 107-98-2 | Health and Safety Comm. (UK) | TWA: 375 mg/m ³ (100 ppm); STEL: 560 mg/m ³ (150 ppm) | Skin Notation |
| N-Butyl Acetate | 123-86-4 | Health and Safety Comm. (UK) | TWA:724 mg/m ³ (150 ppm);STEL:966 mg/m ³ (200 ppm) | |
| diiron trioxide | 1309-37-1 | Health and Safety Comm. (UK) | TWA(as Fe, fume):5 mg/m ³ ;TWA(Inhalable):10 mg/m ³ ;TWA(respirable):4 mg/m ³ ;STEL(as Fe, fume):10 mg/m ³ | |
| Xylene | 1330-20-7 | Health and Safety Comm. (UK) | TWA:220 mg/m ³ (50 ppm);STEL:441 mg/m ³ (100 ppm) | Skin Notation |
| Silica, crystalline (airborne particles of respirable size) | 14808-60-7 | Health and Safety Comm. (UK) | TWA(respirable):0.1 mg/m ³ | |

Health and Safety Comm. (UK) : UK Health and Safety Commission

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

ppm: parts per million

mg/m³: milligrams per cubic metre

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use explosion-proof ventilation equipment. Provide ventilated enclosure for heat curing. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Wear eye/face protection.

The following eye protection(s) are recommended: Indirect vented goggles.

Skin/hand protection

Wear protective gloves.

Gloves made from the following material(s) are recommended: Butyl rubber.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Select one of the following approved respirators based on airborne concentration of contaminants and in accordance with regulations:

Half facepiece or fullface air-purifying respirator with organic vapour cartridges and P2 particulate prefilters.

SECTION 9: Physical and chemical properties

3M Scotchkote Epoxy Coating EP2306HF (70), Red Oxide (Part A)

9.1. Information on basic physical and chemical properties

| | |
|--|---|
| Physical state | Liquid. |
| Specific Physical Form: | Thixotropic liquid. |
| Appearance/Odour | Pungent solvent odour; Red colour |
| pH | <i>Not applicable.</i> |
| Boiling point/boiling range | ≥ 137 °C |
| Melting point | <i>Not applicable.</i> |
| Flammability (solid, gas) | Flammable liquid: Category 3. |
| Explosive properties | Not classified |
| Oxidising properties | Not classified |
| Flash point | ≥ 26 °C [<i>Test Method:</i> Closed Cup] |
| Autoignition temperature | ≥ 400 °C |
| Flammable Limits(LEL) | 1 % |
| Flammable Limits(UEL) | 13.8 % |
| Vapour pressure | 1,517.2 Pa [<i>@ 25 °C</i>] [<i>Test Method:</i> Calculated] [<i>Details:</i> Calculated Raoult's Law at 25°C] |
| Relative density | 1.49 [<i>Ref Std:</i> WATER=1] |
| Water solubility | Negligible |
| Partition coefficient: n-octanol/water | <i>No data available.</i> |
| Evaporation rate | <i>No data available.</i> |
| Vapour density | <i>No data available.</i> |
| Viscosity | <i>No data available.</i> |
| Density | 1.49 g/ml |

9.2. Other information

| | |
|----------------------------------|---|
| Volatile organic compounds (VOC) | 259 g/l [<i>Test Method:</i> Estimated] [<i>Details:</i> EU Definition (Part A and Part B mixture)] |
| Percent volatile | 16.63 % |

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.

Temperatures above the boiling point.

10.5 Incompatible materials

Amines.

Combustibles.

Reaction with water, alcohols, and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

Strong acids.

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Strong bases.
Strong oxidising agents.
Water

10.6 Hazardous decomposition products

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

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:

Eye contact

Moderate eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Dust created by cutting, grinding, sanding, or machining may cause eye irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin contact

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.

Inhalation

Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain. May cause target organ effects after inhalation.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea. May cause target organ effects after ingestion.

Target Organ Effects:

Respiratory effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish coloured skin (cyanosis), sputum production, changes in lung function tests, and respiratory failure. Auditory effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Prolonged or repeated exposure may cause:

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.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Toxicological Data

Acute Toxicity

3M Scotchkote Epoxy Coating EP2306HF (70), Red Oxide (Part A)

| Name | Route | Species | Value | UN GHS Classification |
|---|--------------------------------|---------|---|----------------------------------|
| Overall product | Ingestion | | No test data available; calculated ATE >5,000 mg/kg | Not classified (13.328% unknown) |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Dermal | Rat | LD50 > 1,600 mg/kg | Not classified |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Ingestion | Rat | LD50 > 1,000 mg/kg | Not classified |
| diiron trioxide | Dermal | | LD50 3,100 mg/kg | Category5 |
| diiron trioxide | Inhalation-Dust/Mist (4 hours) | | LC50 0.96 mg/l | Category4 |
| diiron trioxide | Ingestion | | LD50 3,700 mg/kg | Category5 |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | Dermal | | LD50 estimated to be 2,000 - 5,000 mg/kg | Category5 |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | Ingestion | | LD50 estimated to be 2,000 - 5,000 mg/kg | Category5 |
| 1-Methoxypropan-2-ol | Dermal | Rabbit | LD50 11,000-13,800 mg/kg | Not classified |
| 1-Methoxypropan-2-ol | Inhalation-Vapor (4 hours) | Rat | LC50 56 mg/l | Not classified |
| 1-Methoxypropan-2-ol | Ingestion | Rat | LD50 6,100 mg/kg | Not classified |
| Quartz | Ingestion | | LD50 estimated to be > 5,000 mg/kg | Not classified |
| N-Butyl Acetate | Dermal | Rabbit | LD50 > 5,000 mg/kg | Not classified |
| N-Butyl Acetate | Inhalation-Vapor (4 hours) | Rat | LC50 1 mg/l | Category4 |
| N-Butyl Acetate | Ingestion | Rat | LD50 > 8,800 mg/kg | Not classified |
| Xylene | Dermal | Rabbit | LD50 > 4,300 mg/kg | Category5 |
| Xylene | Inhalation-Vapor (4 hours) | Rat | LC50 28 mg/l | Category5 |
| Xylene | Ingestion | Rat | LD50 3,523 mg/kg | Category5 |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value | UN GHS Classification |
|---|---------|--|-----------------------|
| Overall product | | No test data available; calculated to be mild irritant | Category 3 |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | | Mild irritant | Category 3 |
| diiron trioxide | | No significant irritation | Not classified |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | | No data available | |
| 1-Methoxypropan-2-ol | | Minimal irritation | Not classified |
| Quartz | | No significant irritation | Not classified |
| N-Butyl Acetate | | Minimal irritation | Not classified |
| Xylene | | Mild irritant | Category 3 |

Serious Eye Damage/Irritation

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| Name | Species | Value | UN GHS Classification |
|---|---------|--|-----------------------|
| Overall product | | No test data available; calculated to be moderate irritant | Category 2B |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | | Moderate irritant | Category 2B |
| diiron trioxide | | No significant irritation | Not classified |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | | No data available | |
| 1-Methoxypropan-2-ol | | Mild irritant | Not classified |
| Quartz | | No data available | |
| N-Butyl Acetate | | Moderate irritant | Category 2B |
| Xylene | | Mild irritant | Not classified |

Skin Sensitisation

| Name | Species | Value | UN GHS Classification |
|---|---------|--|------------------------------------|
| Overall product | | No test data available. | Category 1 based on component data |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | | Sensitising | Category 1 |
| diiron trioxide | | Some positive data exist, but the data are not sufficient for classification | Not classified |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | | No data available | |
| 1-Methoxypropan-2-ol | | Not sensitizing | Not classified |
| Quartz | | No data available | |
| N-Butyl Acetate | | Not sensitizing | Not classified |
| Xylene | | No data available | |

Respiratory Sensitisation

| Name | Species | Value | UN GHS Classification |
|---|---------|--|--|
| Overall product | | No test data available. | Not classified based on component data |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Human | Some positive data exist, but the data are not sufficient for classification | Not classified |
| diiron trioxide | | No data available | |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | | No data available | |
| 1-Methoxypropan-2-ol | | No data available | |
| Quartz | | No data available | |
| N-Butyl Acetate | | No data available | |
| Xylene | | No data available | |

Germ Cell Mutagenicity

| Name | Route | Value | UN GHS Classification |
|--|---------|-------------------------|--|
| Overall product | | No data available | Overall Germ Cell Mutagenicity classification Not classified |
| Overall product | | No test data available. | |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- | In vivo | Not mutagenic | Not classified |

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| | | | |
|---|----------|--|----------------|
| epoxypropane | | | |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | In Vitro | Some positive data exist, but the data are not sufficient for classification | Not classified |
| diiron trioxide | In Vitro | Not mutagenic | Not classified |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | | No data available | |
| 1-Methoxypropan-2-ol | In vivo | Not mutagenic | Not classified |
| Quartz | In vivo | Some positive data exist, but the data are not sufficient for classification | Not classified |
| N-Butyl Acetate | In Vitro | Not mutagenic | Not classified |
| Xylene | In Vitro | Not mutagenic | Not classified |
| Xylene | In vivo | Not mutagenic | Not classified |

Carcinogenicity

| Name | Route | Species | Value | UN GHS Classification |
|---|------------|---------|--|-------------------------------------|
| Overall product | | | No test data available. | Category 1A based on component data |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Dermal | Mouse | Some positive data exist, but the data are not sufficient for classification | Not classified |
| diiron trioxide | Inhalation | | Some positive data exist, but the data are not sufficient for classification | Not classified |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | | | No data available | |
| 1-Methoxypropan-2-ol | Inhalation | | Some positive data exist, but the data are not sufficient for classification | Not classified |
| Quartz | Inhalation | | Carcinogenic. | Category 1A |
| N-Butyl Acetate | | | No data available | |
| Xylene | Dermal | | Not carcinogenic | Not classified |
| Xylene | Ingestion | | Not carcinogenic | Not classified |
| Xylene | Inhalation | | Some positive data exist, but the data are not sufficient for classification | Not classified |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test result | Exposure Duration | UN GHS Classification |
|--|-----------|----------------------------------|---------|---------------------|-------------------|--|
| Overall product | | No test data available. | | | | Not classified based on component data |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3- | Ingestion | Not toxic to female reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation | |

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| | | | | | | |
|---|------------|---|--------|-----------------------------|----------------------|--|
| epoxypropane | | | | | | |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Ingestion | Not toxic to male reproduction | Rat | NOAEL 750 mg/kg/day | 2 generation | |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Dermal | Not toxic to development | Rabbit | NOAEL 300 mg/kg/day | during organogenesis | |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Ingestion | Not toxic to development | Rat | NOAEL 750 mg/kg/day | 2 generation | |
| diiron trioxide | | No data available | | | | |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | | No data available | | | | |
| 1-Methoxypropan-2-ol | Ingestion | Some positive reproductive/developmental data exist, but the data are not sufficient for classification | | NOEL 370 mg/kg/day | | |
| 1-Methoxypropan-2-ol | Inhalation | Some positive reproductive/developmental data exist, but the data are not sufficient for classification | | NOAEL 3.7 mg/l | | |
| Quartz | | No data available | | | | |
| N-Butyl Acetate | Inhalation | Some positive reproductive/developmental data exist, but the data are not sufficient for classification | | NOAEL 1,500 ppm | | |
| Xylene | Ingestion | Some positive reproductive/developmental data exist, but the data are not sufficient for classification | | LOAEL 2,060 mg/kg/day | | |
| Xylene | Inhalation | Some positive reproductive/developmental data exist, but the data are not sufficient for classification | | NOAEL N/A | | |

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Lactation

| Name | Route | Species | Value | UN GHS Classification |
|-----------------|-----------|---------|--|--|
| Overall product | | | No test data available. | Not classified based on component data |
| Xylene | Ingestion | | Does not cause effects on or via lactation | Not classified |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration | UN GHS Classification |
|---|------------|-----------------------------------|--|---------|-----------------------|-------------------|------------------------------------|
| Overall product | | | No test data available. | | | | Category 1 based on component data |
| diiron trioxide | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | Irritation Positive | | Not classified |
| 4,4'-Isopropylidene ediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | | | No data available | | | | |
| 1-Methoxypropan-2-ol | Dermal | central nervous system depression | Some positive data exist, but the data are not sufficient for classification | | NOAEL 1,800 mg/kg/day | | Not classified |
| 1-Methoxypropan-2-ol | Inhalation | central nervous system depression | May cause drowsiness or dizziness | | LOEL 3.75 mg/l | | Category 3 |
| Quartz | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | Irritation Positive | | Not classified |
| N-Butyl Acetate | Inhalation | respiratory system | May cause damage to organs | | LOAEL 2,565 mg/m3 | | Category 2 |
| N-Butyl Acetate | Inhalation | central nervous system depression | May cause drowsiness or dizziness | | NOAEL N/A | | Category 3 |
| N-Butyl Acetate | Inhalation | respiratory irritation | May cause respiratory irritation | | Irritation Positive | | Category 3 |
| Xylene | Inhalation | auditory | Causes damage | | LOAEL 6.3 | | Category 1 |

3M Scotchkote Epoxy Coating EP2306HF (70), Red Oxide (Part A)

| | | | | | | | |
|--------|------------|-----------------------------------|--|--|------------------------|--|----------------|
| | | system | to organs | | mg/l | | |
| Xylene | Inhalation | central nervous system depression | May cause drowsiness or dizziness | | LOAEL 0.43 mg/l | | Category 3 |
| Xylene | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | | Irritation Positive | | Not classified |
| Xylene | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | | NOEL N/A | | Not classified |
| Xylene | Inhalation | eyes | Some positive data exist, but the data are not sufficient for classification | | NOEL 3.5 mg/l | | Not classified |
| Xylene | Inhalation | nervous system | All data are negative | | NOAEL 0.65 mg/l | | Not classified |
| Xylene | Ingestion | central nervous system depression | May cause drowsiness or dizziness | | NOAEL N/A | | Category 3 |
| Xylene | Ingestion | eyes | Some positive data exist, but the data are not sufficient for classification | | NOEL 125 mg/kg | | Not classified |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test result | Exposure Duration | UN GHS Classification |
|--|-----------|---|--|---------|-----------------------------|-------------------|------------------------------------|
| Overall product | | | No test data available. | | | | Category 1 based on component data |
| 4,4'-Isopropylidene ediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Dermal | liver | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 1,000 mg/kg/day | 2 years | Not classified |
| 4,4'-Isopropylidene ediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Dermal | nervous system | All data are negative | Rat | NOAEL 1,000 mg/kg/day | 13 weeks | Not classified |
| 4,4'-Isopropylidene ediphenol, oligomeric reaction products with 1-chloro-2,3- | Ingestion | auditory system heart endocrine system hematopoietic system | All data are negative | Rat | NOAEL 1,000 mg/kg/day | 28 days | Not classified |

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| | | | | | | | |
|---|------------|---|--|--|--------------------------|--|----------------|
| epoxypropane | | liver eyes kidney and/or bladder | | | | | |
| diiron trioxide | Inhalation | pneumoconiosis | Causes damage to organs through prolonged or repeated exposure | | LOAEL 0.01 mg/l | | Category 1 |
| diiron trioxide | Inhalation | pulmonary fibrosis | Some positive data exist, but the data are not sufficient for classification | | NOAEL N/A | | Not classified |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | | | No data available | | | | |
| 1-Methoxypropan-2-ol | Dermal | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | | NOAEL 1,800 mg/kg/day | | Not classified |
| 1-Methoxypropan-2-ol | Dermal | hematopoietic system | All data are negative | | NOAEL 1,000 mg/kg/day | | Not classified |
| 1-Methoxypropan-2-ol | Inhalation | liver kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | | NOEL 3.7 mg/l | | Not classified |
| 1-Methoxypropan-2-ol | Inhalation | hematopoietic system | All data are negative | | NOAEL 2.2 mg/l | | Not classified |
| 1-Methoxypropan-2-ol | Ingestion | liver | Some positive data exist, but the data are not sufficient for classification | | NOAEL 920 mg/kg/day | | Not classified |
| 1-Methoxypropan-2-ol | Ingestion | kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | | NOEL 920 mg/kg/day | | Not classified |
| Quartz | Inhalation | silicosis | Causes damage to organs through prolonged or repeated exposure | | NOAEL N/A | | Category 1 |
| N-Butyl Acetate | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | | LOEL 7,260 mg/m3 | | Not classified |
| N-Butyl Acetate | Inhalation | olfactory system | Some positive data exist, but the data are not sufficient for classification | | NOAEL 2,400 mg/m3 | | Not classified |
| N-Butyl | Inhalation | kidney | Some positive data | | LOEL | | Not classified |

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| | | | | | | | |
|---------|------------|--|--|--|-----------------------|--|----------------|
| Acetate | | and/or bladder | exist, but the data are not sufficient for classification | | 7,260 mg/m3 | | |
| Xylene | Inhalation | nervous system | Causes damage to organs through prolonged or repeated exposure | | LOAEL 0.4 mg/l | | Category 1 |
| Xylene | Inhalation | auditory system | May cause damage to organs though prolonged or repeated exposure | | LOAEL 7.8 mg/l | | Category 2 |
| Xylene | Inhalation | liver | Some positive data exist, but the data are not sufficient for classification | | NOEL N/A | | Not classified |
| Xylene | Inhalation | heart endocrine system hematopoietic system muscles kidney and/or bladder respiratory system | All data are negative | | NOAEL 3.5 mg/l | | Not classified |
| Xylene | Ingestion | auditory system | Some positive data exist, but the data are not sufficient for classification | | LOEL 900 mg/kg/day | | Not classified |
| Xylene | Ingestion | liver kidney and/or bladder | Some positive data exist, but the data are not sufficient for classification | | NOEL N/A | | Not classified |
| Xylene | Ingestion | heart skin endocrine system bone, teeth, nails, and/or hair hematopoietic system immune system nervous system respiratory system | All data are negative | | NOAEL 1,000 mg/kg/day | | Not classified |

Aspiration Hazard

| Name | Value | UN GHS Classification |
|---|--------------------------|---|
| Overall product | No test data available. | Not classified based on component and/or viscosity data |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | Not an aspiration hazard | Not classified |
| diiron trioxide | Not an aspiration hazard | Not classified |
| 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with fatty acids, C18-unsaturated, dimers | Not an aspiration hazard | Not classified |

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| | | |
|----------------------|--------------------------|----------------|
| 1-Methoxypropan-2-ol | Not an aspiration hazard | Not classified |
| Quartz | Not an aspiration hazard | Not classified |
| N-Butyl Acetate | Not an aspiration hazard | Not classified |
| Xylene | Aspiration hazard | Category 1 |

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 3: Harmful 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 |
|---|------------|----------------|------------|----------|---------------|--------------|
| 1-Methoxypropan-2-ol | 107-98-2 | | Laboratory | 96 hours | LC50 | 4,600 mg/l |
| 1-Methoxypropan-2-ol | 107-98-2 | Water flea | Laboratory | 48 hours | EC50 | >23,300 mg/l |
| N-Butyl Acetate | 123-86-4 | Fathead minnow | Laboratory | 96 hours | LC50 | 18 mg/l |
| N-Butyl Acetate | 123-86-4 | Green algae | Laboratory | 72 hours | EC50 | 674.7 mg/l |
| Xylene | 1330-20-7 | Rainbow trout | Laboratory | 96 hours | LC50 | 2.6 mg/l |
| Xylene | 1330-20-7 | Water flea | Laboratory | 48 hours | LC50 | 2.4 mg/l |
| Xylene | 1330-20-7 | Green algae | Laboratory | 72 hours | EC50 | 3.2 mg/l |
| 4,4'-Isopropylidene diphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 25068-38-6 | Ricefish | Laboratory | 96 hours | LC50 | 1.41 mg/l |

12.2. Persistence and degradability

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|----------------------|----------|----------------|----------|------------|-------------|---------------------------|
| 1-Methoxypropan-2-ol | 107-98-2 | Biodegradation | 28 days | BOD | 90 % weight | OECD 301C - MITI test (I) |

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| | | | | | | |
|---|------------|----------------|---------|-----|--------------|--------------------------------|
| N-Butyl Acetate | 123-86-4 | Biodegradation | 28 days | BOD | 98 % weight | OECD 301D - Closed bottle test |
| Xylene | 1330-20-7 | Biodegradation | 28 days | BOD | 100 % weight | OECD 301C - MITI test (I) |
| 4,4'-Isopropylidene diphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 25068-38-6 | Biodegradation | 28 days | BOD | 0 % weight | OECD 301C - MITI test (I) |

12.3 : Bioaccumulative potential

| Material | CAS Nbr | Test type | Duration | Study Type | Test result | Protocol |
|---|------------|-----------------|----------|------------------------|-------------|--|
| N-Butyl Acetate | 123-86-4 | Bioaccumulation | | Log Kow | 1.78 | Other methods |
| Xylene | 1330-20-7 | Bioaccumulation | 56 days | Bioaccumulation factor | 12.0 | Other methods |
| 4,4'-Isopropylidene diphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane | 25068-38-6 | Bioaccumulation | 28 days | Bioaccumulation factor | <42 | OECD 305E - Bioaccumulation flow-through fish test |

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

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

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. Incinerate in a permitted waste incineration facility. **As a disposal alternative,..... - As a disposal alternative,** Dispose of waste product in a permitted industrial waste facility.

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.

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EU waste code (product as sold)

08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

SECTION 14: Transportation information

GR-2001-3331-6, GR-2001-3332-4

ADR/RID: UN1263, PAINT RELATED MATERIAL, 3., III, (D/E), ENVIRONMENTALLY HAZARDOUS, ADR Classification Code: F1.

IMDG-CODE: UN1263, PAINT RELATED MATERIAL, (EPOXY RESIN), 3, III, Marine Pollutant, (EPOXY RESIN), EMS: FE,SE.

ICAO/IATA: UN1263, PAINT RELATED MATERIAL, 3., III.

SECTION 15: Regulatory information

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

Carcinogenicity

| <u>Ingredient</u> | <u>CAS Nbr</u> | <u>Classification</u> | <u>Regulation</u> |
|-------------------|----------------|--------------------------------|---|
| diiron trioxide | 1309-37-1 | Gr. 3: Not classifiable | International Agency for Research on Cancer |
| Quartz | 14808-60-7 | Grp. 1: Carcinogenic to humans | International Agency for Research on Cancer |
| Xylene | 1330-20-7 | Gr. 3: Not classifiable | International Agency for Research on Cancer |

Global inventory status

Contact 3M for more information. The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Philippines RA 6969 requirements. Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

| | |
|------|---|
| H226 | Flammable liquid and vapour. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |

H413 May cause long lasting harmful effects to aquatic life.

List of relevant R-phrases

| | |
|--------|---|
| R10 | Flammable. |
| R20 | Harmful by inhalation. |
| R21 | Harmful in contact with skin. |
| R36 | Irritating to eyes. |
| R38 | Irritating to skin. |
| R43 | May cause sensitisation by skin contact. |
| R48/20 | Harmful: danger of serious damage to health by prolonged exposure through inhalation. |
| R51/53 | Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. |
| R53 | May cause long-term adverse effects in the aquatic environment. |
| R66 | Repeated exposure may cause skin dryness or cracking. |
| R67 | Vapours may cause drowsiness and dizziness. |

Revision information:

Revision Changes:

Section 2: Symbol was modified.

Section 12: Acute aquatic hazard information was modified.

Section 12: Chronic aquatic hazard information was modified.

Section 16: Regulations – Inventories – EU ONLY was modified.

Section 11: Acute Toxicity table was modified.

Carcinogenicity Table was modified.

Serious Eye Damage/Irritation Table was modified.

Germ Cell Mutagenicity Table was modified.

Skin Sensitisation Table was modified.

Respiratory Sensitisation Table was modified.

Reproductive Toxicity Table was modified.

Skin Corrosion/Irritation Table was modified.

Target Organs - Repeated Table was modified.

Target Organs - Single Table was modified.

Section 11: Health Effects - Eye information was modified.

Section 11: Health Effects - Inhalation information was modified.

Section 11: Health Effects - Ingestion information was modified.

Section 11: Health Effects - Other information was modified.

Section 6: Accidental release personal information was modified.

Section 6: Accidental release clean-up information was modified.

Section 7: Precautions safe handling information was modified.

Section 7: Conditions safe storage was modified.

Section 8: Appropriate Engineering controls information was modified.

Section 8: Personal Protection - Eye information was modified.

Section 13: Standard Phrase Category Waste GHS was modified.

Section 11: Lactation table heading was added.

Lactation Table was added.

Section 11: Lactation table - Name heading was added.

Section 11: Lactation table - Route heading was added.

Section 11: Lactation table - Species heading was added.

Section 11: Lactation table - UN GHS Classification heading was added.

Section 11: Lactation table - Value heading was added.

Section 8: Personal Protection - Respiratory Information was added.

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

3M United Kingdom MSDSs are available at www.3M.com/uk