



Safety Data Sheet

Copyright, 2012, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilising 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

Document group:	26-9772-0	Version number:	2.02
Revision date:	01/08/2012	Supersedes date:	12/03/2012
Transportation version number:	1.00 (21/10/2010)		

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 KS16W, Red Oxide (Part A)

Product identification numbers

GR-2001-0286-5

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

Highly flammable; F; R11

Harmful; Xn; R20/21

Irritant; Xi; R36/38

Sensitizing; R43

Harmful; Xn; R48/20

For full text of R phrases, see Section 16.

2.2. Label elements

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)**Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive****Symbols**

F Highly flammable.
Xn Harmful.

Contains:

Bisphenol A diglycidyl ether - bisphenol A copolymer; Quartz; Xylene

Risk phrases

R11 Highly flammable.
R20/21 Harmful by inhalation and in contact with skin.
R36/38 Irritating to eyes and skin.
R43 May cause sensitisation by skin contact.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Safety phrases

S16 Keep away from sources of ignition - No Smoking.
S23 Do not breathe gas, fumes, vapour, or spray.
S51 Use only in well ventilated areas.
S36/37 Wear suitable protective clothing and gloves.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Quartz	14808-60-7	EINECS 238-878-4	30 - 60	Xn:R48/20 (Vendor) STOT RE 1, H372 (Self Classified)
Bisphenol A diglycidyl ether - bisphenol A copolymer	25036-25-3		10 - 30	Xi:R36-38; R43 (Self Classified) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 (Self Classified)
Xylene	1330-20-7	EINECS 215-535-7	7 - 13	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)
4-Methylpentan-2-one	108-10-1	EINECS 203-550-1	5 - 10	F:R11; Xn:R20; Xi:R36-37; R66 (EU) Flam. Liq. 2, H225; Acute Tox. 4, H332; Eye Irrit. 2, H319; STOT SE 3, H335; EUH066 (CLP)
Synthetic amorphous silica, fumed, crystalline free	112945-52-5		1 - 5	

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

Ethylbenzene	100-41-4	EINECS 202-849-4	1 - 5	F:R11; Xn:R20 (EU) Flam. Liq. 2, H225; Acute Tox. 4, H332 (CLP)
2-Butoxyethanol	111-76-2	EINECS 203-905-0	< 2	Xn:R20-21-22; Xi:R36-38 (EU) Acute Tox. 3, H331; Acute Tox. 3, H311; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319 (CLP)
Butan-1-ol	71-36-3	EINECS 200-751-6	< 2	Xn:R22; Xi:R37-38-41; R10; R67 (EU) Flam. Liq. 3, H226; Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H336; STOT SE 3, H335 (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

Do not induce vomiting. Get immediate 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 and solids 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

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

Substance

Aldehydes.
Carbon monoxide.
Carbon dioxide.

Condition

During combustion.
During combustion.
During combustion.

5.3. Advice for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) 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. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. 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.

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Ethylbenzene	100-41-4	Health and Safety Comm. (UK)	TWA:441 mg/m ³ (100 ppm);STEL:552 mg/m ³ (125 ppm)	Skin Notation
4-Methylpentan-2-one	108-10-1	Health and Safety Comm. (UK)	TWA:208 mg/m ³ (50 ppm);STEL:416 mg/m ³ (100 ppm)	Skin Notation
2-Butoxyethanol	111-76-2	Health and Safety Comm. (UK)	TWA:123 mg/m ³ (25 ppm);STEL:246 mg/m ³ (50 ppm)	Skin Notation
Silica, amorphous	112945-52-5	Health and Safety Comm. (UK)	TWA(as inhalable dust):6 mg/m ³ ;TWA(as respirable dust):2.4 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	
Butan-1-ol	71-36-3	Health and Safety Comm. (UK)	STEL:154 mg/m ³ (50 ppm)	Skin Notation

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. Curing enclosures must be exhausted to outdoors or to a suitable emission control device. 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.

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

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

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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

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

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

SECTION 9: Physical and chemical properties

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>No data available.</i>
Boiling point/boiling range	≥ 120 °C
Melting point	<i>Not applicable.</i>
Flammability (solid, gas)	Flammable Liquid: Category 2.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	≥ 15 °C [<i>Test Method: Closed Cup</i>]
Autoignition temperature	≥ 450 °C
Flammable Limits(LEL)	≥ 1 % volume
Flammable Limits(UEL)	11.3 % volume
Vapour pressure	11.66 mm
Relative density	1.440 [<i>Ref Std: WATER=1</i>]
Water solubility	0 %
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	1.44 g/ml

9.2. Other information

Volatile organic compounds (VOC)	407.3 g/l [<i>Details: Calculated, Part A and B mix</i>]
Volatile organic compounds (VOC)	447.5 g/l [<i>Details: Calculated, Part A and B mix-10% thinned</i>]
Percent volatile	24.72 %

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.

Strong bases.

Strong oxidising agents.

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

Severe eye irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired 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. May cause target organ effects after inhalation.

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 target organ effects after ingestion.

Target Organ Effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination,

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness. Blood effects: Signs/symptoms may include generalised weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and hemoglobinemia.

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. Silicosis: Signs/symptoms may include breathlessness, weakness, chest pain, persistent cough, increased amounts of sputum, and heart disease.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

Toxicological Data**Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		No test data available; calculated ATE >5,000 mg/kg
Quartz	Ingestion		LD50 estimated to be > 5,000 mg/kg
Bisphenol A diglycidyl ether - bisphenol A copolymer	Dermal	Rat	LD50 > 1,600 mg/kg
Bisphenol A diglycidyl ether - bisphenol A copolymer	Ingestion	Rat	LD50 > 1,000 mg/kg
Xylene	Dermal	Rabbit	LD50 > 4,300 mg/kg
Xylene	Inhalation-Vapor (4 hours)	Rat	LC50 28 mg/l
Xylene	Ingestion	Rat	LD50 3,523 mg/kg
4-Methylpentan-2-one	Dermal	Rabbit	LD50 > 16,000 mg/kg
4-Methylpentan-2-one	Ingestion	Rat	LD50 3,038 mg/kg
Ethylbenzene	Dermal	Rabbit	LD50 15,433 mg/kg
Ethylbenzene	Inhalation-Vapor (4 hours)	Rat	LC50 17 mg/l
Ethylbenzene	Ingestion	Rat	LD50 4,769 mg/kg
Synthetic amorphous silica, fumed, crystalline free	Dermal	Rabbit	LD50 > 5,000 mg/kg
Synthetic amorphous silica, fumed, crystalline free	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 0.691 mg/l
Synthetic amorphous silica, fumed, crystalline free	Ingestion	Rat	LD50 > 5,110 mg/kg
Butan-1-ol	Dermal	Rabbit	LD50 3,402 mg/kg
Butan-1-ol	Inhalation-Vapor (4 hours)	Rat	LC50 > 24 mg/l
Butan-1-ol	Ingestion	Rat	LD50 2,290 mg/kg
2-Butoxyethanol	Dermal	Rabbit	LD50 400 mg/kg
2-Butoxyethanol	Inhalation-Vapor (4 hours)	Rat	LC50 2 mg/l
2-Butoxyethanol	Ingestion	Rat	LD50 530 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Quartz		No significant irritation
Bisphenol A diglycidyl ether - bisphenol A copolymer		Mild irritant
Xylene		Mild irritant
4-Methylpentan-2-one		Mild irritant
Ethylbenzene		Mild irritant
Synthetic amorphous silica, fumed, crystalline free		No significant irritation
Butan-1-ol		Mild irritant
2-Butoxyethanol		Irritant

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)**Serious Eye Damage/Irritation**

Name	Species	Value
Quartz		No data available
Bisphenol A diglycidyl ether - bisphenol A copolymer		Moderate irritant
Xylene		Mild irritant
4-Methylpentan-2-one		Moderate irritant
Ethylbenzene		Moderate irritant
Synthetic amorphous silica, fumed, crystalline free		No data available
Butan-1-ol		Severe irritant
2-Butoxyethanol		Severe irritant

Skin Sensitisation

Name	Species	Value
Quartz		No data available
Bisphenol A diglycidyl ether - bisphenol A copolymer		Sensitising
Xylene		No data available
4-Methylpentan-2-one		Not sensitizing
Ethylbenzene		Not sensitizing
Synthetic amorphous silica, fumed, crystalline free		Not sensitizing
Butan-1-ol		Not sensitizing
2-Butoxyethanol		Not sensitizing

Respiratory Sensitisation

Name	Species	Value
Quartz		No data available
Bisphenol A diglycidyl ether - bisphenol A copolymer		Some positive data exist, but the data are not sufficient for classification
Xylene		No data available
4-Methylpentan-2-one		No data available
Ethylbenzene		No data available
Synthetic amorphous silica, fumed, crystalline free		No data available
Butan-1-ol		No data available
2-Butoxyethanol		No data available

Germ Cell Mutagenicity

Name	Route	Value
Quartz	In vivo	Some positive data exist, but the data are not sufficient for classification
Bisphenol A diglycidyl ether - bisphenol A copolymer	In vivo	Some positive data exist, but the data are not sufficient for classification
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	Not mutagenic
4-Methylpentan-2-one	In vivo	Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	In Vitro	Some positive data exist, but the data are not sufficient for classification
Synthetic amorphous silica, fumed, crystalline free	In Vitro	Not mutagenic
Butan-1-ol	Ingestion	Not mutagenic
Butan-1-ol	In Vitro	Some positive data exist, but the data are not sufficient for classification
2-Butoxyethanol	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Quartz	Inhalation		Carcinogenic.

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

Bisphenol A diglycidyl ether - bisphenol A copolymer	Dermal		Some positive data exist, but the data are not sufficient for classification
Xylene	Dermal		Not carcinogenic
Xylene	Ingestion		Not carcinogenic
Xylene	Inhalation		Some positive data exist, but the data are not sufficient for classification
4-Methylpentan-2-one	Inhalation		Some positive data exist, but the data are not sufficient for classification
Ethylbenzene	Inhalation		Carcinogenic.
Synthetic amorphous silica, fumed, crystalline free	Not specified.		Some positive data exist, but the data are not sufficient for classification
Butan-1-ol			No data available
2-Butoxyethanol	Not specified.		Some positive data exist, but the data are not sufficient for classification

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Quartz		No data available			
Bisphenol A diglycidyl ether - bisphenol A copolymer	Dermal	Not toxic to reproduction and/or development		NOAEL 300 mg/kg/day	
Bisphenol A diglycidyl ether - bisphenol A copolymer	Ingestion	Not toxic to reproduction and/or development		NOAEL 750 mg/kg/day	
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	
4-Methylpentan-2-one	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		NOEL 250 mg/kg/day	
4-Methylpentan-2-one	Inhalation	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		NOEL 0.41 mg/l	
Ethylbenzene	Inhalation	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		LOEL 0.43 mg/l	
Synthetic amorphous silica, fumed, crystalline free	Ingestion	Not toxic to reproduction and/or development		NOAEL 1,350 mg/kg	

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

Butan-1-ol	Ingestion	Not toxic to reproduction and/or development		NOAEL 5,000 mg/kg/day	
Butan-1-ol	Inhalation	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		NOEL 3,500 ppm	
2-Butoxyethanol	Dermal	Not toxic to reproduction and/or development		NOEL 1,760 mg/kg	
2-Butoxyethanol	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		NOAEL 100 mg/kg/day	
2-Butoxyethanol	Inhalation	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		NOAEL 50 ppm	

Lactation

Name	Route	Species	Value
Xylene	Ingestion		Does not cause 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
Quartz	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
Bisphenol A diglycidyl ether - bisphenol A copolymer	Inhalation	respiratory irritation	All data are negative		Irritation Negative	
Xylene	Inhalation	auditory system	Causes damage to organs		LOAEL 6.3 mg/l	
Xylene	Inhalation	central nervous system depression	May cause drowsiness or dizziness		LOAEL 0.43 mg/l	
Xylene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification		NOEL N/A	

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

Xylene	Inhalation	eyes	Some positive data exist, but the data are not sufficient for classification		NOEL 3.5 mg/l	
Xylene	Inhalation	nervous system	All data are negative		NOAEL 0.65 mg/l	
Xylene	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL N/A	
Xylene	Ingestion	eyes	Some positive data exist, but the data are not sufficient for classification		NOEL 125 mg/kg	
4-Methylpentan-2-one	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL 10 mg/m ³	
4-Methylpentan-2-one	Inhalation	respiratory irritation	May cause respiratory irritation		Irritation Positive	
4-Methylpentan-2-one	Inhalation	vascular system	Some positive data exist, but the data are not sufficient for classification		NOEL N/A	
4-Methylpentan-2-one	Ingestion	central nervous system depression	May cause drowsiness or dizziness		LOAEL 900 mg/kg/day	
4-Methylpentan-2-one	Ocular	lacrimation	Some positive data exist, but the data are not sufficient for classification		LOAEL 16,800 ppm	
Ethylbenzene	Inhalation	central nervous system depression	May cause drowsiness or dizziness		LOAEL 0.43 mg/l	
Ethylbenzene	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
Synthetic amorphous silica, fumed, crystalline free	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
Butan-1-ol	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL N/A	
Butan-1-ol	Inhalation	respiratory irritation	May cause respiratory irritation		Irritation Positive	
Butan-1-ol	Ingestion	central nervous system depression	May cause drowsiness or dizziness		NOAEL N/A	
2-Butoxyethanol	Dermal	blood	Some positive data exist, but the data are not sufficient for classification		NOAEL N/A	

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

2-Butoxyethanol	Dermal	liver	Some positive data exist, but the data are not sufficient for classification		LOAEL 72 mg/kg	
2-Butoxyethanol	Dermal	endocrine system	Some positive data exist, but the data are not sufficient for classification		LOEL 451 mg/kg	
2-Butoxyethanol	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		LOAEL 451 mg/kg	
2-Butoxyethanol	Inhalation	blood	May cause damage to organs		NOAEL N/A	
2-Butoxyethanol	Inhalation	central nervous system depression	May cause drowsiness or dizziness		LOAEL 100 ppm	
2-Butoxyethanol	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
2-Butoxyethanol	Ingestion	blood	Causes damage to organs		NOAEL N/A	
2-Butoxyethanol	Ingestion	central nervous system depression kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		LOAEL 530 mg/kg	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Quartz	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure		NOAEL N/A	
Bisphenol A diglycidyl ether - bisphenol A copolymer	Dermal	liver	Some positive data exist, but the data are not sufficient for classification		NOEL 1 mg/kg/day	
Bisphenol A diglycidyl ether - bisphenol A copolymer	Dermal	nervous system	All data are negative		NOAEL 1,000 mg/kg/day	
Bisphenol A diglycidyl ether - bisphenol A copolymer	Ingestion	auditory system heart endocrine system blood hematopoietic system liver eyes kidney and/or bladder	All data are negative		NOAEL 1,000 mg/kg/day	
Xylene	Inhalation	nervous system	Causes damage to		LOAEL 0.4	

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

			organs through prolonged or repeated exposure		mg/l	
Xylene	Inhalation	auditory system	May cause damage to organs through prolonged or repeated exposure		LOAEL 7.8 mg/l	
Xylene	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification		NOEL N/A	
Xylene	Inhalation	heart endocrine system hematopoietic system muscles kidney and/or bladder respiratory system	All data are negative		NOAEL 3.5 mg/l	
Xylene	Ingestion	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		NOEL N/A	
Xylene	Ingestion	auditory system	Some positive data exist, but the data are not sufficient for classification		LOEL 900 mg/kg/day	
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	
4-Methylpentan-2-one	Inhalation	heart	Some positive data exist, but the data are not sufficient for classification		LOEL 200 ppm	
4-Methylpentan-2-one	Inhalation	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		LOEL 0.41 mg/l	
4-Methylpentan-2-one	Inhalation	respiratory system	All data are negative		NOAEL 4.1 mg/l	
4-Methylpentan-2-one	Inhalation	endocrine system hematopoietic system nervous system	All data are negative		NOAEL 0.41 mg/l	
4-Methylpentan	Ingestion	kidney and/or bladder	Some positive data exist, but the		NOEL 50 mg/kg/day	

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

-2-one			data are not sufficient for classification			
4-Methylpentan-2-one	Ingestion	endocrine system hematopoietic system liver	Some positive data exist, but the data are not sufficient for classification		NOEL 250 mg/kg/day	
4-Methylpentan-2-one	Ingestion	heart immune system muscles nervous system respiratory system	All data are negative		NOAEL 1,040 mg/kg/day	
Ethylbenzene	Inhalation	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		NOAEL 1.1 mg/l	
Ethylbenzene	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification		NOEL 1.6 mg/l	
Ethylbenzene	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification		NOEL 1.3 mg/l	
Ethylbenzene	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification		NOEL 0.32 mg/l	
Ethylbenzene	Inhalation	bone, teeth, nails, and/or hair muscles	All data are negative		NOAEL 4.2 mg/l	
Ethylbenzene	Inhalation	heart immune system respiratory system	All data are negative		NOAEL 3.2 mg/l	
Ethylbenzene	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification		NOEL 136 mg/kg/day	
Ethylbenzene	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		NOEL 136 mg/kg	
Synthetic amorphous silica, fumed, crystalline free	Inhalation	respiratory system silicosis	Some positive data exist, but the data are not sufficient for classification		NOEL N/A	
Butan-1-ol	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification		LOAEL 80 ppm	
Butan-1-ol	Inhalation	blood	Some positive		LOEL 50 ppm	

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

			data exist, but the data are not sufficient for classification			
Butan-1-ol	Inhalation	liver kidney and/or bladder respiratory system	Some positive data exist, but the data are not sufficient for classification		LOEL 100 ppm	
Butan-1-ol	Inhalation	nervous system	All data are negative		NOAEL 3,000 ppm	
Butan-1-ol	Ingestion	liver	Some positive data exist, but the data are not sufficient for classification		LOEL 800 mg/kg/day	
Butan-1-ol	Ingestion	blood	Some positive data exist, but the data are not sufficient for classification		NOEL 30 mg/kg/day	
2-Butoxyethanol	Dermal	blood	Some positive data exist, but the data are not sufficient for classification		NOAEL N/A	
2-Butoxyethanol	Dermal	endocrine system	All data are negative		NOEL 150 mg/kg/day	
2-Butoxyethanol	Inhalation	blood	May cause damage to organs through prolonged or repeated exposure		NOAEL 0.12 mg/l	
2-Butoxyethanol	Inhalation	endocrine system	Some positive data exist, but the data are not sufficient for classification		LOAEL 385 ppm	
2-Butoxyethanol	Inhalation	liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		NOEL 31 ppm	
2-Butoxyethanol	Ingestion	blood	Causes damage to organs through prolonged or repeated exposure		NOAEL N/A	
2-Butoxyethanol	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		NOAEL N/A	

Aspiration Hazard

Name	Value
Quartz	Not an aspiration hazard
Bisphenol A diglycidyl ether - bisphenol A copolymer	Not an aspiration hazard
Xylene	Aspiration hazard
4-Methylpentan-2-one	Some positive data exist, but the data are not sufficient for classification

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

Ethylbenzene	Aspiration hazard
Synthetic amorphous silica, fumed, crystalline free	Not an aspiration hazard
Butan-1-ol	Some positive data exist, but the data are not sufficient for classification
2-Butoxyethanol	Not an 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 3: Harmful to aquatic life.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

No product test data available.

No component test data available.

12.2. Persistence and degradability

No test data available.

12.3 : Bioaccumulative potential

No test data available.

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, utilize an acceptable permitted waste disposal facility.

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

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

EU waste code (product as sold)

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

SECTION 14: Transportation information

GR-2001-0286-5

ADR/RID: UN1263, PAINT RELATED MATERIAL, LIMITED QUANTITY, 3., II, (--), ADR Classification Code: F1.

IMDG-CODE: UN1263, PAINT RELATED MATERIAL, 3, II, LIMITED QUANTITY, EMS: FE,SE.

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

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>
2-Butoxyethanol	111-76-2	Gr. 3: Not classifiable	International Agency for Research on Cancer
Ethylbenzene	100-41-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
4-Methylpentan-2-one	108-10-1	Grp. 2B: Possible human carc.	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 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 Japan Chemical Substance 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 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

EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H372	Causes damage to organs through prolonged or repeated exposure.

List of relevant R-phrases

R10	Flammable.
R11	Highly flammable.
R20	Harmful by inhalation.
R21	Harmful in contact with skin.
R22	Harmful if swallowed.
R36	Irritating to eyes.
R37	Irritating to respiratory system.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R43	May cause sensitisation by skin contact.
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

Revision information:

Revision Changes:

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

Section 8: Respiratory protection - recommended respirators was modified.

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

Section 2: Indication of danger information was modified.

Section 8: Occupational exposure limit table was modified.

Aspiration Hazard Table 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.

Lactation 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 5: Fire - Extinguishing media information was modified.

Section 6: Accidental release personal information was modified.

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

Section 13: Standard Phrase Category Waste GHS was modified.

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

Section 8: Respiratory protection - recommended respirators guide was added.

Section 2: R phrase reference was added.

Label: CLP Supplemental Hazard Statements was deleted.

3M Scotchkote Epoxy Coating KS16W, Red Oxide (Part A)

Label: CLP Supplemental Hazard Statements - Header was deleted.

Label: CLP Supplemental Information - Header was deleted.

Section 11: UN GHS Classification table heading was deleted.

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

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