



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:	28-3736-7	Version number:	1.04
Revision date:	26/07/2012	Supersedes date:	17/01/2012
Transportation version number:	1.00 (03/11/2010)		

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 EA9 HG, Black (Part A)

Product identification numbers

GR-2001-0246-9

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

For full text of R phrases, see Section 16.

2.2. Label elements

3M Scotchkote Epoxy Coating EA9 HG, Black (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; 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.

Safety phrases

S16 Keep away from sources of ignition - No Smoking.
S23C Do not breathe vapour or spray.
S51 Use only in well ventilated areas.
S36/37 Wear suitable protective clothing and gloves.
S62 If swallowed, do not induce vomiting: Seek medical advice immediately and show this container or label.

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
Bisphenol A diglycidyl ether - bisphenol A copolymer	25036-25-3		25 - 35	Xi:R36-38; R43 (Self Classified) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 (Self Classified)
Barium Sulfate	7727-43-7	EINECS 231-784-4	20 - 30	
Xylene	1330-20-7	EINECS 215-535-7	15 - 25	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)
Butan-1-ol	71-36-3	EINECS 200-751-6	5 - 10	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)

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

4-Methylpentan-2-one	108-10-1	EINECS 203-550-1	1 - 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	
Ethylbenzene	100-41-4	EINECS 202-849-4	1 - 5	F:R11; Xn:R20 (EU) Flam. Liq. 2, H225; Acute Tox. 4, H332 (CLP)
4-Hydroxy-4-methylpentan-2-one	123-42-2	EINECS 204-626-7	1 - 5	Xi:R36 (EU) Eye Irrit. 2, H319 (CLP)
Carbon black	1333-86-4	EINECS 215-609-9	< 2	

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 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.

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Aldehydes.	During combustion.
Carbon monoxide.	During combustion.
Carbon dioxide.	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 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. Store away from acids. Store away from oxidising agents. Store away from strong bases.

3M Scotchkote Epoxy Coating EA9 HG, Black (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
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	
4-Hydroxy-4-methylpentan-2-one	123-42-2	Health and Safety Comm. (UK)	TWA: 241 mg/m ³ (50 ppm); STEL: 362 mg/m ³ (75 ppm)	
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
Carbon black	1333-86-4	Health and Safety Comm. (UK)	TWA: 3.5 mg/m ³ ; STEL: 7 mg/m ³	
Butan-1-ol	71-36-3	Health and Safety Comm. (UK)	STEL:154 mg/m ³ (50 ppm)	Skin Notation
Barium Sulfate	7727-43-7	Health and Safety Comm. (UK)	TWA(as inhalable dust):10 mg/m ³ ;TWA(as respirable dust):4 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

CELL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

Use explosion-proof ventilation equipment. Provide appropriate local exhaust ventilation at transfer points. Provide appropriate local exhaust ventilation on open containers. 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.

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

Skin/hand protection

Wear protective gloves and protective clothing.

Gloves made from the following material(s) are recommended: Polyvinyl alcohol (PVA).
Polymer laminate

The following protective clothing material(s) are recommended: Apron - polymer laminate

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:

Full facepiece air-purifying respirator suitable for organic vapours

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.
Appearance/Odour	Pungent solvent odour; Black colour
pH	<i>Not applicable.</i>
Boiling point/boiling range	≥ 110 °C
Melting point	<i>Not applicable.</i>
Flammability (solid, gas)	Flammable Liquid: Category 2.
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	20.5 °C [<i>Test Method</i> :Closed Cup]
Autoignition temperature	≥ 370 °C
Flammable Limits(LEL)	1 % volume
Flammable Limits(UEL)	13 % volume
Vapour pressure	1,333.2 Pa
Relative density	1.21 [<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	≥ 0.1 Pa-s
Density	1.21 g/ml

9.2. Other information

Volatile organic compounds (VOC)	509.2 g/l [<i>Test Method</i> :Estimated] [<i>Details</i> :EU Definition (Part A & B mix)]
Volatile organic compounds (VOC)	540.2 g/l [<i>Test Method</i> :Estimated] [<i>Details</i> :EU Definition (Part A & B mix - 10% thinned)]
Percent volatile	41.20 % weight

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

Amines.

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

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

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)**Target Organ Effects:**

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

Name	Route	Species	Value
Overall product	Dermal		No test data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No test data available; calculated ATE >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
Barium Sulfate	Ingestion	Rat	LD50 > 15,000 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
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
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
4-Hydroxy-4-methylpentan-2-one	Dermal	Rabbit	LD50 13,645 mg/kg
4-Hydroxy-4-methylpentan-2-one	Ingestion	Rat	LD50 4,000 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
Carbon black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon black	Ingestion	Rat	LD50 > 8,000 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

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Bisphenol A diglycidyl ether - bisphenol A copolymer		Mild irritant
Barium Sulfate		No data available
Xylene		Mild irritant

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

Butan-1-ol		Mild irritant
4-Methylpentan-2-one	Rabbit	Mild irritant
4-Hydroxy-4-methylpentan-2-one		Minimal irritation
Ethylbenzene		Mild irritant
Carbon black		No significant irritation
Synthetic amorphous silica, fumed, crystalline free	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Bisphenol A diglycidyl ether - bisphenol A copolymer		Moderate irritant
Barium Sulfate		No data available
Xylene		Mild irritant
Butan-1-ol		Severe irritant
4-Methylpentan-2-one	Rabbit	Mild irritant
4-Hydroxy-4-methylpentan-2-one		Severe irritant
Ethylbenzene		Moderate irritant
Carbon black		No data available
Synthetic amorphous silica, fumed, crystalline free	Rabbit	No significant irritation

Skin Sensitisation

Name	Species	Value
Bisphenol A diglycidyl ether - bisphenol A copolymer		Sensitising
Barium Sulfate		No data available
Xylene		No data available
Butan-1-ol		Not sensitizing
4-Methylpentan-2-one	Guinea pig	Not sensitizing
4-Hydroxy-4-methylpentan-2-one		No data available
Ethylbenzene		Not sensitizing
Carbon black		No data available
Synthetic amorphous silica, fumed, crystalline free	Human and animal	Not sensitizing

Respiratory Sensitisation

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

Germ Cell Mutagenicity

Name	Route	Value
Bisphenol A diglycidyl ether - bisphenol A copolymer	In vivo	Not mutagenic
Bisphenol A diglycidyl ether - bisphenol A copolymer	In Vitro	Some positive data exist, but the data are not sufficient for classification
Barium Sulfate		No data available
Xylene	In Vitro	Not mutagenic
Xylene	In vivo	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
4-Methylpentan-2-one	In Vitro	Not mutagenic

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

4-Hydroxy-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
Carbon black	In vivo	Some positive data exist, but the data are not sufficient for classification
Synthetic amorphous silica, fumed, crystalline free	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Bisphenol A diglycidyl ether - bisphenol A copolymer	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Barium Sulfate			No data available
Xylene	Dermal		Not carcinogenic
Xylene	Ingestion		Not carcinogenic
Xylene	Inhalation		Some positive data exist, but the data are not sufficient for classification
Butan-1-ol			No data available
4-Methylpentan-2-one	Inhalation	Multiple animal species	Carcinogenic.
4-Hydroxy-4-methylpentan-2-one			No data available
Ethylbenzene	Inhalation		Carcinogenic.
Carbon black	Dermal		Not carcinogenic
Carbon black	Ingestion		Not carcinogenic
Carbon black	Inhalation		Carcinogenic.
Synthetic amorphous silica, fumed, crystalline free	Not specified.	Mouse	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
Bisphenol A diglycidyl ether - bisphenol A copolymer	Ingestion	Not toxic to female reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Bisphenol A diglycidyl ether - bisphenol A copolymer	Ingestion	Not toxic to male reproduction	Rat	NOAEL 750 mg/kg/day	2 generation
Bisphenol A diglycidyl ether - bisphenol A copolymer	Dermal	Not toxic to development	Rabbit	NOAEL 300 mg/kg/day	during organogenesis
Bisphenol A diglycidyl ether - bisphenol A copolymer	Ingestion	Not toxic to development	Rat	NOAEL 750 mg/kg/day	2 generation
Barium Sulfate		No data available			
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		NOAEL N/A	

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

		classification			
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	
4-Methylpentan-2-one	Inhalation	Not toxic to female reproduction	Multiple animal species	NOAEL 8.2 mg/l	2 generation
4-Methylpentan-2-one	Ingestion	Some positive male reproductive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	13 weeks
4-Methylpentan-2-one	Inhalation	Some positive male reproductive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 8.2 mg/l	2 generation
4-Methylpentan-2-one	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Mouse	NOAEL 12.3 mg/l	during organogenesis
4-Hydroxy-4-methylpentan-2-one	Ingestion	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		NOEL 300 mg/kg/day	
Ethylbenzene	Inhalation	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		LOEL 0.43 mg/l	
Carbon black		No data available			
Synthetic amorphous silica, fumed, crystalline free	Ingestion	Not toxic to female reproduction	Rat	NOAEL 509 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline free	Ingestion	Not toxic to male reproduction	Rat	NOAEL 497 mg/kg/day	1 generation
Synthetic amorphous silica, fumed, crystalline free	Ingestion	Not toxic to development	Rat	NOAEL 1,350 mg/kg/day	during organogenesis

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	Value	Species	Test result	Exposure
------	-------	--------	-------	---------	-------------	----------

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

		Organ(s)				Duration
Barium Sulfate			No data available			
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	
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	
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	
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	Human	NOAEL 0.9 mg/l	7 minutes
4-Methylpentan-2-one	Inhalation	vascular system	Some positive data exist, but the data are not sufficient for classification	Dog	NOAEL Not available	not available
4-Methylpentan-2-one	Ingestion	central nervous system depression	May cause drowsiness or dizziness		LOAEL 900 mg/kg/day	
4-Hydroxy-4-methylpentan-2-one	Inhalation	central nervous system depression	May cause drowsiness or dizziness		NOAEL NA	
4-Hydroxy-4-methylpentan-	Inhalation	respiratory irritation	Some positive data exist, but the		Irritation Positive	

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

2-one			data are not sufficient for classification			
4-Hydroxy-4-methylpentan-2-one	Ingestion	central nervous system depression	May cause drowsiness or dizziness			
4-Hydroxy-4-methylpentan-2-one	Ingestion	blood liver	Some positive data exist, but the data are not sufficient for classification		LOAEL 1,882 mg/kg	
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	
Carbon black	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
Synthetic amorphous silica, fumed, crystalline free			No data available			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Bisphenol A diglycidyl ether - bisphenol A copolymer	Dermal	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	2 years
Bisphenol A diglycidyl ether - bisphenol A copolymer	Dermal	nervous system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	13 weeks
Bisphenol A diglycidyl ether - bisphenol A copolymer	Ingestion	auditory system heart endocrine system hematopoietic system liver eyes kidney and/or bladder	All data are negative	Rat	NOAEL 1,000 mg/kg/day	28 days
Barium Sulfate			No data available			
Xylene	Inhalation	nervous system	Causes damage to organs through prolonged or repeated exposure		LOAEL 0.4 mg/l	
Xylene	Inhalation	auditory system	May cause damage to organs though prolonged or repeated		LOAEL 7.8 mg/l	

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

			exposure			
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	
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 data exist, but the data are not sufficient for classification		LOEL 50 ppm	
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	

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

4-Methylpentan-2-one	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.41 mg/l	13 weeks
4-Methylpentan-2-one	Inhalation	heart	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.8 mg/l	2 weeks
4-Methylpentan-2-one	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Multiple animal species	NOAEL 0.4 mg/l	90 days
4-Methylpentan-2-one	Inhalation	respiratory system	All data are negative	Multiple animal species	NOAEL 4.1 mg/l	14 weeks
4-Methylpentan-2-one	Inhalation	endocrine system hematopoietic system	All data are negative	Multiple animal species	NOAEL 0.41 mg/l	90 days
4-Methylpentan-2-one	Inhalation	nervous system	All data are negative	Multiple animal species	NOAEL 0.41 mg/l	13 weeks
4-Methylpentan-2-one	Ingestion	endocrine system hematopoietic system liver kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1,000 mg/kg/day	13 weeks
4-Methylpentan-2-one	Ingestion	heart immune system muscles nervous system respiratory system	All data are negative	Rat	NOAEL 1,040 mg/kg/day	120 days
4-Hydroxy-4-methylpentan-2-one	Inhalation	blood kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		NOEL 1.035 mg/l	
4-Hydroxy-4-methylpentan-2-one	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification		NOEL 0.232 mg/l	
4-Hydroxy-4-methylpentan-2-one	Ingestion	endocrine system blood liver	Some positive data exist, but the data are not sufficient for classification		NOEL 300 mg/kg/day	
4-Hydroxy-4-methylpentan-2-one	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		NOEL 100 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	

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

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	
Carbon black	Inhalation	heart	Some positive data exist, but the data are not sufficient for classification		NOEL N/A	
Carbon black	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification		NOAEL N/A	
Synthetic amorphous silica, fumed, crystalline free	Inhalation	respiratory system silicosis	All data are negative	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

Name	Value
Bisphenol A diglycidyl ether - bisphenol A copolymer	Not an aspiration hazard
Barium Sulfate	Not an aspiration hazard
Xylene	Aspiration hazard
Butan-1-ol	Some positive data exist, but the data are not sufficient for classification
4-Methylpentan-2-one	Some positive data exist, but the data are not sufficient for classification
4-Hydroxy-4-methylpentan-2-one	Not an aspiration hazard
Ethylbenzene	Aspiration hazard
Carbon black	Not an aspiration hazard
Synthetic amorphous silica, fumed, crystalline free	Not an aspiration hazard

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

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 component test data available.

Material	Organism	Type	Exposure	Test endpoint	Test result
3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)		Insufficient to classify			% weight

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

Dispose of completely cured (or polymerised) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. If no other disposal options are available, waste product that has been completely cured or polymerised may be placed in a landfill properly designed for industrial waste. 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

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

available treatment and disposal facilities.

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

EU waste code (product as sold)

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

SECTION 14: Transportation information

GR-2001-0246-9

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>
Carbon black	1333-86-4	Grp. 2B: Possible human carc.	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
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 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.
H302	Harmful if swallowed.
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.

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

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.
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.

Safety phrase was modified.

Section 8: Respiratory protection - recommended respirators was modified.

Section 16: List of relevant R phrase information was modified.

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

Section 2: Indication of danger information 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 8: Appropriate Engineering controls 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.

Section 2: Notes on labelling heading was deleted.

Section 2: Label remarks was deleted.

Label: CLP Supplemental Hazard Statements was deleted.

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

3M Scotchkote Epoxy Coating EA9 HG, Black (Part A)

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