

Black Epoxy Repair Filler

Page: 1

Compilation date: 25/06/2015

Revision date: 25/06/2015

Revision No: 6

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

1.1. Product identifier

Epoxy Black Repair Filler

Product name: Epoxy Black Repair Filler

Product code:

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

Use of substance / mixture: PC1: Adhesives, sealants. PC9a: Coatings and paints, thinners, paint removers. PC9b:

Fillers, putties, plasters, modelling clay. PC32: Polymer preparations and compounds. PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for

formulation of preparations* and articles (multistage and/or significant contact)

PROC8a: Transfer of substance or preparation (charging/discharging) from/to

vessels/large containers at non-dedicated facilities PROC8b: Transfer of substance or

preparation (charging/discharging) from/to vessels/large containers at dedicated

facilities PROC9: Transfer of substance or preparation into small containers (dedicated

filling line, including weighing) PROC10: Roller application or brushing PROC13:

Treatment of articles by dipping and pouring PROC19: Hand-mixing with intimate

contact and only PPE available ERC2: Formulation of preparations* ERC3: Formulation

in materials ERC5: Industrial use resulting in inclusion into or onto a matrix ERC6d:

Industrial use of process regulators for polymerisation processes in production of

resins, rubbers, polymers

1.3. Details of the supplier of the safety data sheet

Company name: Easy Composites Ltd

Unit 39, Park Hall Business Village

Longton, Stoke on Trent

Staffordshire

ST3 5XA

United Kingdom

Tel: +44 (0) 1782 454499

Fax: +44 (0) 1782 596868

Email: sales@easycomposites.co.uk

Black Epoxy Repair Filler

Page: 2

1.4. Emergency telephone number

Emergency tel: +44 (0) 1782 454499

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317

Most important adverse effects: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation.

Toxic to aquatic life with long lasting effects.

2.2. Label elements

Label elements:

Hazard statements: H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H411: Toxic to aquatic life with long lasting effects.

Hazard pictograms: GHS07: Exclamation mark

GHS09: Environmental





Signal words: Warning

Precautionary statements: P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+352: IF ON SKIN: Wash with plenty of water/.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P321: Specific treatment (see instructions on this label).

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

Black Epoxy Repair Filler

Page: 3

1-25%

BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT} - REACH registered number(s): 01-2119456619-26

EINECS	CAS	PBT / WEL	CLP Classification	Percent
500-033-5	25068-38-6	-	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317; Aquatic Chronic 2:	>50%
			H411	
1,3-PROPANED	IOL, 2,2-BIS(HYD	PROXYMETHYL)-, POLYMER WITH 2-(CHLOROMETHYL)OXRIANE	
608-564-5	30973-88-7	-	Skin Irrit. 2: H315; Eye Irrit. 2: H319;	1-25%
			Skin Sens. 1: H317	
1,4-BIS(2,3-EPC	XYPROPOXY) B	UTANE		
219-371-7	2425-79-8	-	Acute Tox. 4: H332; Acute Tox. 4: H312;	1-25%
			Eye Irrit. 2: H319; Skin Irrit. 2: H315;	
			Skin Sens. 1: H317	
PROPYLENE CA	ARBONATE			

Section 4: First aid measures

203-572-1

4.1. Description of first aid measures

108-32-7

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash

Eye Irrit. 2: H319

immediately with plenty of soap and water. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. Consult a doctor.

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

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath. Exposure may

cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Show this safety data sheet to the doctor in attendance.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Water spray. Water fog. Dry chemical powder. Carbon dioxide. Alcohol or polymer foam.

Alcohol resistant foam.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

Black Epoxy Repair Filler

Page: 4

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact

with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Mark out the contaminated area with signs and prevent access to unauthorised

personnel. Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Mix with sand or vermiculite. Transfer to a closable, labelled salvage container for

disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.

Eye protection: Safety glasses.

Skin protection: Protective clothing.

Black Epoxy Repair Filler

Page: 5

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Viscous Paste

Colour: Black

Odour: Characteristic odour

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: No data available.

Boiling point/range°C: No data available. Melting point/range°C: No data available.

Flammability limits %: lower: No data available. upper: No data available.

Flash point°C: No data available. Part.coeff. n-octanol/water: No data available.

Autoflammability°C: No data available. Vapour pressure: No data available.

Relative density: 1.16 - 1.21 **pH:** No data available.

VOC g/I: No data available.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Polymerisation may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Amines.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Black Epoxy Repair Filler

Page: 6

Hazardous ingredients:

BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}

ORL	MUS	LD50	15600	mg/kg
ORL	RAT	LD50	11400	mg/kg
SKN	RBT	LD50	>20	ml/kg

1,4-BIS(2,3-EPOXYPROPOXY) BUTANE

ODI	DAT	1.050	4404	
ORL	RAT	LD50	1134	mg/kg

PROPYLENE CARBONATE

DERMAL	RBT	LD50	>20000	mg/kg
ORL	MUS	LD50	20700	mg/kg
ORL	RAT	LD50	29100	μl/kg

Relevant hazards for substance:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	DRM	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness.Ingestion: Nausea and stomach pain may occur.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath. Exposure may

cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

1,3-PROPANEDIOL, 2,2-BIS(HYDROXYMETHYL)-, POLYMER WITH 2-(CHLOROMETHYL)OXRIANE

Golden Orfe (Leuciscus idus)	96H LC50	460	mg/l	
------------------------------	----------	-----	------	--

PROPYLENE CARBONATE

Daphnia magna	48H EC50	500	mg/l

Black Epoxy Repair Filler

Page: 7

FISH (Cyprinus carpio)	96H LC0	1000	mg/l
FISH (Leuciscus idus melanotus)	96H LC50	5300	mg/l

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal

company.

Disposal of packaging: Arrange for collection by specialised disposal company.

 $\textbf{NB:} \quad \text{The user's attention is drawn to the possible existence of regional or national} \\$

regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN3082

14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Epoxy Resin)

14.3. Transport hazard class(es)

Transport class: 9

14.4. Packing group

Packing group: |||

14.5. Environmental hazards

Environmentally hazardous: Yes Marine pollutant: No

14.6. Special precautions for user

Tunnel code: E

Black Epoxy Repair Filler

Page: 8

Transport category: 3

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture

by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No

453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: 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.

H411: Toxic to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive

and shall be used only as a guide. This company shall not be held liable for any

damage resulting from handling or from contact with the above product.



Black Epoxy Repair Filler Hardener

Page: 9

Compilation date: 25/06/2015

Revision date: 07/07/2015

Revision No: 7

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

1.1. Product identifier

Product name: Black Epoxy Repair Filler Hardener

Product code:

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

Use of substance / mixture: PC1: Adhesives, sealants. PC9a: Coatings and paints, thinners, paint removers. PC9b:

Fillers, putties, plasters, modelling clay. PC32: Polymer preparations and compounds. PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for formulation of preparations* and articles (multistage and/or significant contact) PROC8a: Transfer of substance or preparation (charging/discharging) from/to

PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC10: Roller application or brushing PROC13:

Treatment of articles by dipping and pouring PROC19: Hand-mixing with intimate contact and only PPE available ERC2: Formulation of preparations* ERC3: Formulation in materials ERC5: Industrial use resulting in inclusion into or onto a matrix ERC6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers

1.3. Details of the supplier of the safety data sheet

Company name: Easy Composites Ltd

Unit 39, Park Hall Business Village

Longton, Stoke on Trent

Staffordshire

ST3 5XA

United Kingdom

Tel: +44 (0) 1782 454499

Fax: +44 (0) 1782 596868

Email: sales@easycomposites.co.uk

Black Epoxy Repair Filler Hardener

Page: 10

1.4. Emergency telephone number

Emergency tel: +44 (0) 1782 454499

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302+312; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Repr. 2:

H361fd; Resp. Sens. 1: H334; Skin Corr. 1B: H314; Skin Sens. 1: H317

Most important adverse effects: Harmful if swallowed or in contact with skin. Causes severe skin burns and eye

damage. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of damaging fertility. Suspected of damaging the unborn child. Very toxic to aquatic life. Very toxic to aquatic life with long lasting

effects.

2.2. Label elements

Label elements:

Hazard statements: H302+312: Harmful if swallowed or in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Hazard pictograms: GHS05: Corrosion

GHS07: Exclamation mark GHS08: Health hazard

GHS09: Environmental









Signal words: Danger

Precautionary statements: P260: Do not breathe dust/fumes/gas/mist/vapours/spray.

P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+312: IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell.

P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P302+350: IF ON SKIN: Gently wash with plenty of soap and water.

P302+352: IF ON SKIN: Wash with plenty of water/.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Black Epoxy Repair Filler Hardener

Page: 11

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

2-PIPERAZIN-1-YLETHYLAMINE - REACH registered number(s): 01-2119471486-30

EINECS	CAS	PBT / WEL	CLP Classification	Percent
205-411-0	140-31-8	-	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412	>50%
NONYLPHEN	OL			
246-672-0	25154-52-3	-	Repr. 2: H361fd; Acute Tox. 4: H302; Skin Corr. 1B: H314; Aquatic Acute 1: H400; Aquatic Chronic 1: H410	25-50%
PIPERAZINE				
203-808-3	110-85-0	-	Repr. 2: H361fd; Skin Corr. 1B: H314; Resp. Sens. 1: H334; Skin Sens. 1: H317	1-25%

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still

on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist

examination.

Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10

minutes. If unconscious, check for breathing and apply artificial respiration if necessary.

If unconscious and breathing is OK, place in the recovery position. Transfer to hospital

as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If

unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and

provide oxygen if available. Transfer to hospital as soon as possible.

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

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be

bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may

cause coughing or wheezing.

Black Epoxy Repair Filler Hardener

Page: 12

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray

to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Corrosive. In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact

with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Notify the police and fire brigade immediately. If outside keep bystanders upwind and

away from danger point. Mark out the contaminated area with signs and prevent access

to unauthorised personnel. Do not attempt to take action without suitable protective

clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the

escape of liquid.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Clean-up should be dealt with only by qualified personnel familiar with the specific

substance. Absorb into dry earth or sand. Transfer to a closable, labelled salvage

container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.

Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

Suitable packaging: Must only be kept in original packaging.

Black Epoxy Repair Filler Hardener

Page: 13

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

PIPERAZINE

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	0.1 mg/m3	0.3 mg/m3	-	-

DNEL/PNEC Values

Hazardous ingredients:

2-PIPERAZIN-1-YLETHYLAMINE

Effect	Population	Value	Exposure	Туре
Acute - Systemic	Workers	20 mg/kg bw/day	Dermal	DNEL
Acute - Systemic	Workers	21.4 mg/m3	Inhalation	DNEL
Acute - Local	Workers	0.04 mg/cm2	Dermal	DNEL
Acute - Systemic	Consumers	10 mg/kg bw/day	Dermal	DNEL
Acute - Systemic	Consumers	5.3 mg/m3	Inhalation	DNEL
Acute - Systemic	Consumers	1.5 mg/kg bw/day	Oral	DNEL
Acute - Local	Consumers	0.02 mg/cm2	Dermal	DNEL
Long term - Systemic	Consumers	1.7 mg/kg bw/day	Dermal	DNEL
Long term - Local	Consumers	0.9 mg/m3	Inhalation	DNEL
Long term - Local	Consumers	0.003 mg/cm2	Dermal	DNEL
-	-	0.058 mg/l	Fresh water	PNEC
-	-	0.0058 mg/l	Marine water	PNEC
-	-	215 mg/kg dw	Fresh water sediments	PNEC
-	-	21.5 mg/kg dw	Marine sediments	PNEC
-	-	250 mg/l	Microorganisms in sewage treatment	PNEC
-	-	42.9 mg/kg dw	Soil (agricultural)	PNEC

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Black Epoxy Repair Filler Hardener

Page: 14

Skin protection: Impermeable protective clothing.

Environmental: The floor of the storage room must be impermeable to prevent the escape of liquids.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Pale green

Odour: Characteristic odour

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: 150 mPas (25°C)

Boiling point/range°C: No data available. Melting point/range°C: No data available.

Flammability limits %: lower: No data available. upper: No data available.

Flash point°C: No data available. Part.coeff. n-octanol/water: No data available.

Autoflammability°C: No data available. Vapour pressure: No data available.

Relative density: 0.96 - 1.01 **pH:** No data available.

VOC g/l: No data available.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Black Epoxy Repair Filler Hardener

Page: 15

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

2-PIPERAZIN-1-YLETHYLAMINE

IPR	MUS	LD50	250	mg/kg
ORL	RAT	LD50	2140	μl/kg

NONYLPHENOL

ORL	MUS	LD50	1231	mg/kg
ORL	RAT	LD50	580	mg/kg

PIPERAZINE

IVN	RAT	LD50	1340	mg/kg
ORL	MUS	LD50	600	mg/kg
ORL	RAT	LD50	1900	mg/kg

Relevant hazards for substance:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	DRM ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	INH DRM	Hazardous: calculated
Reproductive toxicity		Hazardous: calculated

Symptoms / routes of exposure

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be

bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may

cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

Black Epoxy Repair Filler Hardener

Page: 16

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal

company.

Disposal of packaging: Arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national

regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN2735

14.2. UN proper shipping name

Shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.

(Aliphatic amines)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: |||

14.5. Environmental hazards

Environmentally hazardous: Yes Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 3

Section 15: Regulatory information

Black Epoxy Repair Filler Hardener

Page: 17

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture

by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No

453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H302: Harmful if swallowed.

H302+312: Harmful if swallowed or in contact with skin.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H361fd: Suspected of damaging fertility. Suspected of damaging the unborn child.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive

and shall be used only as a guide. This company shall not be held liable for any

damage resulting from handling or from contact with the above product.



WEST & SENIOR LIMITED

MILLTOWN ST • RADCLIFFE • MANCHESTER • M26 I WE • UNITED KINGDOM TEL: +44(0)161 724 7131 • FAX: +44(0)161 724 9519

e-mail: info@westsenior.co.uk

SAFETY DATA SHEET VARIOUS EP LEAD FREE PRODUCTS

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

1.1. Product identifier

Product names [BLACK], [CHESTNUT BROWN], [DUST GREY], [IVORY], [MOTORWAY BLUE], [WHITE]

Product number EPOXY PIGMENT PASTE.

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

COLOURING OF EPOXIDE COMPOUNDS & SYSTEMS Identified uses

1.3. Details of the supplier of the safety data sheet

WEST AND SENIOR LIMITED. **Supplier**

MILLTOWN STREET

RADCLIFFE

MANCHESTER, M26 1WE.

TEL + 44 01617247131 FAX + 44 01617249519 info@westsenior.co.uk

1.4. Emergency telephone number

Emergency telephone 24 HOUR EMERGENCY TELEPHONE NUMBER: + 44 (0) 7775 840728

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

Classification (67/548/EEC or Xi;R36/38. R43. N;R51/53.

1999/45/EC)

Human health See Section 11 for additional information on health hazards.

Environmental The product contains a substance which is harmful to aquatic organisms and which may

cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Pictogram





Signal word Warning

VARIOUS EP LEAD FREE PRODUCTS

Hazard statements H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements P261 Avoid breathing vapour/spray.

P264 Wash contaminated skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical advice/attention.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

P501 Dispose of contents/container in accordance with national regulations.

Contains EPOXY RESIN (Number average MW <= 700), Formaldehyde, polymer with

(chloromethyl)oxirane and phenol, mw<=700, OXIRANE, MONO [(C12-14-

R43 Xi;R36/38 N;R51/53

ALKYLOXY)METHYL] DERIVS

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

BISPHENOL A-(EPICHLORHYDRIN) {REACTION

40-60%

PRODUCT)

Classification Classification (67/548/EEC or 1999/45/EC)

Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Aquatic Chronic 2 - H411

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS

5-10%

CAS number: 68609-97-2

Classification Classification (67/548/EEC or 1999/45/EC)

Skin Irrit. 2 - H315 R43 Xi;R38

Skin Sens. 1 - H317

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

VARIOUS EP LEAD FREE PRODUCTS

Inhalation Move affected person to fresh air at once. If breathing stops, provide artificial respiration.

When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Keep affected person warm and at rest. Get medical attention

immediately.

Ingestion Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not

induce vomiting. Rinse mouth thoroughly with water. Give plenty of water to drink. Get

medical attention immediately.

Skin contact Remove affected person from source of contamination. Remove contaminated clothing

immediately and wash skin with soap and water. Get medical attention if any discomfort

continues.

Eye contact Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15

minutes and get medical attention. Get medical attention promptly if symptoms occur after

washing.

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

Inhalation No specific symptoms known.

Ingestion No specific symptoms known.

Skin contact Prolonged contact may cause redness, irritation and dry skin.

Eye contact Irritating to eyes. Symptoms following overexposure may include the following: Redness.

Pain.

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

Notes for the doctor
No specific recommendations. Treatment of exposure should be directed at the control of

symptoms and the clinical condition of the patient.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Unsuitable extinguishing

media

Not known.

5.2. Special hazards arising from the substance or mixture

Specific hazards Fire or high temperatures create: Toxic gases/vapours/fumes of: Carbon dioxide (CO2).

Carbon monoxide (CO). Thermal decomposition or combustion products may include the

following substances: Toxic gases or vapours.

Hazardous combustion

products

Carbon dioxide (CO2). Carbon monoxide (CO). Halogenated hydrocarbons.

5.3. Advice for firefighters

Protective actions during

firefighting

Isolate area. Very toxic to aquatic organisms. Control run-off water by containing and keeping

it out of sewers and watercourses.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing. Use air-supplied respirator, gloves and protective goggles.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8. Keep unnecessary and unprotected personnel from

entering the area. Avoid inhalation of vapours. Isolate area.

VARIOUS EP LEAD FREE PRODUCTS

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Spillages or uncontrolled

discharges into watercourses must be reported immediately to the Environmental Agency or

other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into

containers. Avoid the spillage or runoff entering drains, sewers or watercourses. For waste

disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. See Section 11

for additional information on health hazards. Collect and dispose of spillage as indicated in

Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Do not eat, drink or smoke when using the product. Persons susceptible to allergic reactions

should not handle this product. Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists. Keep only in the original container. Store in tightly-closed, original container.

Wear suitable protective clothing as protection against splashing or contamination.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT} (CAS: 25068-38-6)

DNEL Industry - Dermal; Short term systemic effects: 8.3 mg/kg/day

Industry - Inhalation; Short term systemic effects: 12.3 mg/m³ Industry - Dermal; Long term systemic effects: 8.3 mg/kg/day Industry - Inhalation; Long term systemic effects: 12.3 mg/m³ Consumer - Dermal; Short term systemic effects: 3.6 mg/kg/day Consumer - Inhalation; Short term systemic effects: 0.75 mg/m³ Consumer - Oral; Short term systemic effects: 0.75 mg/kg/day

Consumer - Dermal; Long term systemic effects: 3.6 mg/kg/day Consumer - Inhalation; Long term systemic effects: 0.75 mg/m³

PNEC - Fresh water; 3 mg/l

- Marine water; 0.3 mg/l

Sediment (Freshwater); 0.5 mg/kg
Sediment (Marinewater); 0.5 mg/kg
Intermittent release; 0.013 mg/l

8.2. Exposure controls

VARIOUS EP LEAD FREE PRODUCTS

Protective equipment





Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible.

Other skin and body

protection

AVOID ALL SKIN AND RESPIRATORY CONTACT! Wear appropriate clothing to prevent any

possibility of skin contact. Wear apron or protective clothing in case of contact.

Hygiene measures

Provide eyewash station. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove

any clothing that becomes contaminated. When using do not eat, drink or smoke.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Check that the

respirator fits tightly and the filter is changed regularly.

Environmental exposure

controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to

reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Liquid. or Coloured paste.

Colour Variable
Odour Slight.

Melting point Not determined.

Flash point >150°C

Evaporation rate Not determined.

Upper/lower flammability or

Initial boiling point and range

Not determined.

Not determined.

explosive limits

Vapour pressure Not determined.

Vapour density Not determined.

Viscosity Not determined.

9.2. Other information

Other information No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

VARIOUS EP LEAD FREE PRODUCTS

Reactivity Stable at normal ambient temperatures and when used as recommended.

10.2. Chemical stability

Stability No particular stability concerns.

10.3. Possibility of hazardous reactions

Possibility of hazardous

Hazardous reactions or instabillity may occur under certain conditions of storage or use.

10.4. Conditions to avoid

Conditions to avoid Avoid releasing into the environment.

10.5. Incompatible materials

Materials to avoid No data recorded.

10.6. Hazardous decomposition products

Hazardous decomposition Does not of

products

reactions

Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information on ingredients.

BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not applicable.

Skin sensitisation

Skin sensitisation Severe skin irritation.

Carcinogenicity

Carcinogenicity Not applicable.

Reproductive toxicity

Reproductive toxicity -

Not applicable.

fertility

Specific target organ toxicity - single exposure

STOT - single exposure Not applicable.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 100 mg/kg, Dermal, Rat

Skin contact Not a skin sensitiser.

Eye contact No specific health hazards known.

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS

Acute toxicity - dermal

Notes (dermal LD₅₀) Not applicable.

VARIOUS EP LEAD FREE PRODUCTS

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Not applicable.

Skin corrosion/irritation

Animal data Moderately irritating.

Serious eye damage/irritation

Serious eye

Slightly irritating.

damage/irritation
Skin sensitisation

Skin sensitisation Severe skin irritation.

SECTION 12: Ecological Information

Ecotoxicity Dangerous for the environment. May cause long-term adverse effects in the aquatic

environment.

12.1. Toxicity

Ecological information on ingredients.

BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}

Acute toxicity - fish LC50, 96 hours, 96 hours: 1.3 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic

invertebrates

EC₅₀, 48 hours, 48 hours: 2.1 mg/l, Daphnia magna

OXIRANE, MONO [(C12-14- ALKYLOXY)METHYL] DERIVS

Acute toxicity - fish LC50, 96 hours, 96 hours: > 1.8 mg/l, Onchorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic

invertebrates

EC₅o, 48 hours, 48 hours: 7.2 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC₅o, 72 hours, 72 hours: ~ 844 mg/l, Freshwater algae

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This substance is not classified as PBT or vPvB according to current EU criteria.

assessment

12.6. Other adverse effects

Other adverse effects Not known.

SECTION 13: Disposal considerations

VARIOUS EP LEAD FREE PRODUCTS

13.1. Waste treatment methods

General information Waste should be treated as controlled waste. Dispose of waste to licensed waste disposal site

in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Avoid the spillage or runoff

entering drains, sewers or watercourses.

Waste class EWC NUMBER: Allocation of a waste code number in accordance with the European Waste

Catalogue, should be carried out in agreement with an EA authorised waste disposal

company.

SECTION 14: Transport information

Road transport notes SP375 – These substances when carried in Single or Combination packaging's containing a

net Qty per single or inner packaging of 5ltr or less for liquids or having a net mass per single or inner packaging of 5kg or less for solids, are not subject to any provisions of ADR provided

the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8

Sea transport notes Chapter 2.10 – 2.10.2.7 – Marine Pollutants packaged in Single or Combination packaging's

containing a net Qty per single or inner packaging of 5ltr or less for liquids or having a net mass per single or inner packaging of 5kg or less for solids, are not subject to any other provisions of this code relevant to Marine Pollutants, provided the packaging's meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. In the case of Marine Pollutants also meeting the Criteria for inclusion in another class, all provisions of this code relevant to

any additional hazards continue to apply

Air transport notes A197 - These substances when carried in Single or Combination packaging's containing a net

Qty per single or inner packaging of 5ltr or less for liquids or having a net mass per single or inner packaging of 5kg or less for solids, are not subject to any other provisions of these regulations provided the packaging's meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and

5.0.2.8

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

UN No. (ADN) 3082

14.2. UN proper shipping name

Proper shipping name

(ADR/RID)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F - epichlorohydrin resin with Number Average Molecular < 700, EPOXY RESIN (Number

average MW <= 700))

Proper shipping name

(IMDG)

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F - epichlorohydrin resin with Number Average Molecular < 700, EPOXY RESIN (Number

average MW <= 700))

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F -

epichlorohydrin resin with Number Average Molecular < 700, EPOXY RESIN (Number

average MW <= 700))

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F -

epichlorohydrin resin with Number Average Molecular < 700, EPOXY RESIN (Number

average MW <= 700))

VARIOUS EP LEAD FREE PRODUCTS

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID subsidiary risk

ADR/RID classification code M6

ADR/RID label 9

IMDG class 9

IMDG subsidiary risk

ICAO class/division 9

ICAO subsidiary risk

ADN class 9

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ADN packing group

ICAO packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-A, S-F

ADR transport category 3

Emergency Action Code 3Z

Hazard Identification Number 90

(ADR/RID)

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: Regulatory information

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

National regulations The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009

No. 716).

VARIOUS EP LEAD FREE PRODUCTS

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as

amended).

Guidance Safety Data Sheets for Substances and Preparations.

Approved Classification and Labelling Guide (Sixth edition) L131.

15.2. Chemical safety assessment

Not applicable.

SECTION 16: Other information

Revision date 16/01/2015

Revision 18

Supersedes date 18/10/2013

Risk phrases in full R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

Hazard statements in full H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.