



SAFETY DATA SHEET

EF80 Flexible Epoxy Resin

Page: 1

Compilation date: 04/06/2015

Revision date: 29/04/2020

Revision No: 4

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

1.1. Product identifier

Product name: EF80 Flexible Epoxy Resin

Product code: EF80

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

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin

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.
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 instructions on this label)
P362+P364: Take off contaminated clothing and wash it before reuse.

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:

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin

Page: 3

BIS [4-(2,3-EPOXYPROPOXY) PHENYL] PROPANE - REACH registered number(s): 01-2119456619-26

EINECS	CAS	PBT / WEL	CLP Classification	Percent
216-823-5	1675-54-3	-	Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317; Aquatic Chronic 2: H411	>50%

HEXANEDIOL DIGLYCIDYLETHER - REACH registered number(s): 01-211946347-41

EINECS	CAS	PBT / WEL	CLP Classification	Percent
240-260-4	16096-31-4	-	Skin Irrit. 2: H315; Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Skin Sens. 1: H317	25-50%

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROANE AND PHENOL - REACH registered number(s): 01-2119454392-40

EINECS	CAS	PBT / WEL	CLP Classification	Percent
500-006-8	9003-36-5	-	Aquatic Chronic 2: H411; Skin Irrit. 2: H315; 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. Wash immediately with plenty of soap and water.

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

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

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. 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. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. 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: 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: In combustion emits toxic fumes.

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin

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: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. 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: 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. The floor of the storage room must be impermeable to prevent the escape of liquids.

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

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin

Page: 5

Hazardous ingredients:

BIS [4-(2,3-EPOXYPROPOXY) PHENYL] PROPANE

Type	Exposure	Value	Population	Effect
DNEL	Dermal	8.33 mg/kg/day	Workers	Systemic
DNEL	Inhalation	12.25 mg/kg/day	Workers	Systemic
DNEL	Dermal	3.571 mg/kg/day	Consumers	Systemic
DNEL	Oral	0.75 mg/kg/day	Consumers	Systemic
PNEC	Fresh water	0.006 mg/l	-	-
PNEC	Marine water	0.0006 mg/l	-	-
PNEC	Microorganisms in sewage treatment	10 mg/l	-	-
PNEC	Fresh water sediments	0.996 mg/kg	-	-
PNEC	Marine sediments	0.0996 mg/kg	-	-
PNEC	Soil (agricultural)	0.196 mg/kg/day	-	-

HEXANEDIOL DIGLYCIDYLETHER

Type	Exposure	Value	Population	Effect
DNEL	Dermal	0.0226 mg/cm ²	Workers	Acute - Local
DNEL	Inhalation	340 ppm	Workers	Acute - Local
DNEL	Dermal	2.8 mg/kg bw/day	Workers	Long term - Systemic
DNEL	Inhalation	0.44 mg/m ³	Workers	Long term - Systemic
DNEL	Dermal	1.7 mg/kg bw/day	Consumers	Acute - Systemic
DNEL	Inhalation	2.9 mg/m ³	Consumers	Acute - Systemic
DNEL	Oral	0.83 mg/kg bw/day	Consumers	Acute - Systemic
DNEL	Dermal	1.7 mg/kg bw/day	Consumers	Long term - Systemic
DNEL	Inhalation	0.89 mg/kg bw/day	Consumers	Long term - Systemic
DNEL	Dermal	0.83 mg/kg bw/day	Consumers	Long term - Systemic
PNEC	Fresh water	0.0115 mg/l	-	-
PNEC	Marine water	0.00115 mg/l	-	-
PNEC	Intermittent releases	0.115 mg/l	-	-
PNEC	STP	1 mg/l	-	-
PNEC	Fresh water sediments	0.283 mg/kg dw	-	-
PNEC	Marine sediments	0.0283 mg/kg dw	-	-
PNEC	Soil (agricultural)	0.223 mg/kg dw	-	-

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin

Page: 6

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.

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

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Pale yellow

Odour: Characteristic odour

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Viscosity: 400 mPas (25°C)

Boiling point/range°C: No data available.

Flammability limits %: lower: No data available.

Flash point°C: No data available.

Autoflammability°C: No data available.

Relative density: 1.10 - 1.15

VOC g/l: No data available.

Melting point/range°C: No data available.

upper: No data available.

Part.coeff. n-octanol/water: No data available.

Vapour pressure: No data available.

pH: 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.

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin

Page: 7

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.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

BIS [4-(2,3-EPOXYPROPOXY) PHENYL] PROPANE

DERMAL	RBT	LD50	23000	mg/kg
IPR	RAT	LD50	2200	mg/kg
ORL	MUS	LD50	15600	mg/kg
ORL	RAT	LD50	11300	µl/kg

HEXANEDIOL DIGLYCIDYLETHER

DERMAL	RAT	LD50	> 2000	mg/kg
ORAL	RAT	LD50	3741	mg/kg

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROANE AND PHENOL

ORAL	RAT	LD50	> 2000	mg/l
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Relevant hazards for product:

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. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. 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

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin

Page: 8

Hazardous ingredients:

BIS [4-(2,3-EPOXYPROPOXY) PHENYL] PROPANE

Daphnia magna	48H EC50	1.8	mg/l
GREEN ALGA (Selenastrum capricornutum)	72H ErC50	11	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	2	mg/l

HEXANEDIOL DIGLYCIDYLETHER

Daphnia magna	24H LC50	47	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	30	mg/l

FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROANE AND PHENOL

Daphnia magna	96H LC50	> 100	mg/l
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12.2. Persistence and degradability

Persistence and degradability: Not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: 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: Toxic to aquatic organisms. Toxic to soil 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.

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: UN3082

14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Epoxy resin)

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin

Page: 9

14.3. Transport hazard class(es)

Transport class: 9

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

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: according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

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

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.

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

1.1. Product identifier

Product name: EF80 Flexible Epoxy Resin Hardener

Product code: EF80 Hardener

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

Email: sales@easycomposites.co.uk

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin Hardener

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 1: H410; Skin Corr. 1B: H314; Skin Sens. 1: H317

Most important adverse effects: Causes severe skin burns and eye damage. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Label elements:

Hazard statements: H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H410: Very toxic to aquatic life with long lasting effects.

Hazard pictograms: GHS05: Corrosion
GHS07: Exclamation mark
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+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352: IF ON SKIN: Wash with plenty of water.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water .
P362+P364: Take off contaminated clothing and wash it before reuse.

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:

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin Hardener

Page: 3

PHENOL, STYRENATED - REACH registered number(s): 01-2119980970-27

EINECS	CAS	PBT / WEL	CLP Classification	Percent
262-975-0	61788-44-1	-	Skin Irrit. 2: H315; Skin Sens. 1: H317; Aquatic Chronic 2: H411	25-50%

AMINES, COCO ALKYL - REACH registered number(s): 01-2119473798-17

262-977-1	61788-46-3	-	Acute Tox. 4: H302; Asp. Tox. 1: H304; STOT SE 3: H335; STOT RE 2: H373; Skin Corr. 1B: H314; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	1-25%
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TRIMETHYLHEXAN-1,6-DIAMINE - REACH registered number(s): 01-2119560598-25

247-063-2	25513-64-8	-	Skin Sens. 1: H317; Skin Corr. 1B: H314; Acute Tox. 4: H302	1-25%
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2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL - REACH registered number(s): 01-2119560597-27

202-013-9	90-72-2	-	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315	1-25%
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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.

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

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin Hardener

Page: 4

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.

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin Hardener

Page: 5

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

Hazardous ingredients:

AMINES, COCO ALKYL

Type	Exposure	Value	Population	Effect
DNEL	Dermal	0.09 mg/kg bw/day	Workers	-
DNEL	Inhalation	0.38 mg/m ³	Workers	-
PNEC	Fresh water	0.00026 mg/l	-	-
PNEC	Marine water	0.000026 mg/l	-	-

TRIMETHYLHEXAN-1,6-DIAMINE

Type	Exposure	Value	Population	Effect
PNEC	Fresh water	0.0295 mg/l	-	-
PNEC	Marine water	0.00295 mg/l	-	-

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

Type	Exposure	Value	Population	Effect
DNEL	Inhalation	0.31 mg/m ³	Workers	-
PNEC	Fresh water	0.84 mg/l	-	-
DNEL	Inhalation (repeated dose)	0.31 mg/m ³	Workers	Systemic
PNEC	Fresh water	0.084 mg/l	-	-
PNEC	Marine water	0.0084 mg/l	-	-
PNEC	Intermittent release	0.84 mg/l	-	-

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.

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

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin Hardener

Page: 6

Colour: Pale yellow

Odour: Characteristic odour

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: Not miscible

Viscosity: 1500 mPas (25°C)

Boiling point/range°C: >200

Melting point/range°C: No data available.

Flammability limits %: lower: 1.0 vol %

upper: No data available.

Flash point°C: >100

Part.coeff. n-octanol/water: No data available.

Autoflammability°C: 350

Vapour pressure: No data available.

Relative density: 1.0

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.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin Hardener

Page: 7

PHENOL, STYRENATED

DERMAL	RAT	LD50	>2000	mg/kg
DUST/MIST	RAT	4H LC0	4.9	mg/l
ORAL	RAT	LD50	>2000	mg/kg

AMINES, COCO ALKYL

DERMAL	RAT	LD50	> 2000	mg/kg
ORAL	RAT	LD50	1300	mg/kg

TRIMETHYLHEXAN-1,6-DIAMINE

ORAL	RAT	LD50	910	mg/kg
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2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

ORAL	RAT	LD50	2169	mg/kg
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Relevant hazards for product:

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: 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

Hazardous ingredients:

PHENOL, STYRENATED

ALGAE (Scenedesmus sp.)	72H EL50	3.14	mg/l
Daphnia magna	48H EL50	1 - 10	mg/l
Daphnia magna	NOEC (21d)	0.115	mg/l

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin Hardener

Page: 8

FISH	96H LL50	14.8	mg/l
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TRIMETHYLHEXAN-1,6-DIAMINE

Daphnia magna	24H EC50	31.5	mg/l
Leuciscus idus	48H LC50	174	mg/l
Pseudomonas putida	17H EC50	89	mg/l
Scenedesmus Subspicatus	72H EC50	29.5	mg/l

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

COMMON CARP (Cyprinus carpio)	96H LC50	175	mg/l
COMMON CARP (Cyprinus carpio)	24H LC50	249	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	24H LC50	222	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC0	180	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC100	240	mg/l
Scenedesmus Subspicatus	72H EC50	84	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

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

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin Hardener

Page: 9

14.2. UN proper shipping name

Shipping name: POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(Contains: TRIMETHYLHEXAN-1,6-DIAMINE; AMINES, COCO ALKYL; 2,4,6-TRIS
(DIMETHYLAMINOMETHYL)PHENOL)

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: II

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 2

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: according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

Phrases used in s.2 and s.3: H302: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H373: May cause damage to organs through prolonged or repeated exposure.
H410: Very toxic to aquatic life with long lasting effects.
H411: Toxic to aquatic life with long lasting effects.

[cont...]

SAFETY DATA SHEET

EF80 Flexible Epoxy Resin Hardener

Page: 10

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.