



SAFETY DATA SHEET

EF80 Flexible Epoxy Resin

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Compilation date: 04/06/2015

Revision date: 04/06/2015

Revision No: 1

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

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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:

[cont...]

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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: H411	>50%

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

240-260-4	16096-31-4	-	Skin Irrit. 2: H315; Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Skin Sens. 1: H317	25-50%
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FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROANE AND PHENOL - REACH registered number(s): 01-2119454392-40

500-006-8	9003-36-5	-	Aquatic Chronic 2: H411; Skin Irrit. 2: H315; Skin Sens. 1: H317	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. Wash 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.

[cont...]

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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

Hazardous ingredients:

HEXANEDIOL DIGLYCIDYLETHER

Type	Exposure	Value	Population	Effect
DNEL	Dermal	0.0226 mg/cm ²	Workers	Acute - Local
DNEL	Inhalation	340 ppm	Workers	Acute - Local

[cont...]

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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	-	-

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.

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.

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: 1.10 - 1.15

[cont...]

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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: 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

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

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 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:

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: 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

Section 13: Disposal considerations

13.1. Waste treatment methods

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

[cont...]

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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)

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: No

14.6. Special precautions for user

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: 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: 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.

[cont...]

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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
Fax: +44 (0) 1782 596868
Email: sales@easycomposites.co.uk

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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; Repr. 2: H361fd; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Corr. 1A: H314; Skin Sens. 1: H317

Most important adverse effects: Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. 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: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
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+352: IF ON SKIN: Wash with plenty of water/.
P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water/shower.

2.3. Other hazards

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

Section 3: Composition/information on ingredients

[cont...]

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3.2. Mixtures

Hazardous ingredients:

NONYLPHENOL

EINECS	CAS	PBT / WEL	CLP Classification	Percent
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%

TRIMETHYLHEXAN-1,6-DIAMINE - REACH registered number(s): 01-2119560598-25

247-134-8	25620-58-0	-	Skin Sens. 1: H317; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; Acute Tox. 4: H302	1-25%
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AMINES, COCO ALKYL

262-977-1	61788-46-3	-	Skin Corr. 1A: H314; Aquatic Acute 1: H400; Acute Tox. 4: H302	1-25%
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2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

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. Consult a doctor.
- Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
- Ingestion:** Do not induce vomiting. Wash out mouth with water. If conscious, give half a litre of water to drink immediately. Transfer to hospital as soon as possible.
- Inhalation:** Move to fresh air in case of accidental inhalation of vapours. Remove casualty from exposure ensuring one's own safety whilst doing so. If conscious, ensure the casualty sits or lies down. If unconscious, check for breathing and apply artificial respiration if necessary. Consult a doctor.

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

- Skin contact:** Severe burns may occur. There may be irritation and redness at the site of contact.
- Eye contact:** There may be severe pain. Corneal burns may occur. May cause permanent damage.
- Ingestion:** Corrosive burns may appear around the lips. There may be soreness and redness of the mouth and throat. 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.

[cont...]

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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: Carbon dioxide. Dry chemical powder. Alcohol or polymer foam. Water spray. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

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

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. 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: Mix with sand or vermiculite. Clean-up should be dealt with only by qualified personnel familiar with the specific substance. 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: 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: Keep container tightly closed. Avoid incompatible materials and conditions - see section 10 of SDS.

Suitable packaging: Must only be kept in original packaging.

[cont...]

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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:

TRIMETHYLHEXAN-1,6-DIAMINE

Type	Exposure	Value	Population	Effect
PNEC	Fresh water	0.0295 mg/l	-	-
PNEC	Marine water	0.00295 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. Gas/vapour filter, type K: ammonia and derivatives (EN141).

Hand protection: Impermeable gloves.

Eye protection: Safety glasses with side-shields. Ensure eye bath is to hand.

Skin protection: Impermeable protective clothing.

Environmental: Ensure all engineering measures mentioned in section 7 of SDS are in place.

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: Not miscible

Viscosity: 990 mPas (25°C)

Boiling point/range°C: >200

Flammability limits %: lower: No data available.

Flash point°C: >100

Autoflammability°C: No data available.

Relative density: 0.97

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.

[cont...]

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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 generate enough heat and gases for fires/explosions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Direct sunlight. Heat. Sources of ignition.

10.5. Incompatible materials

Materials to avoid: Acids. Oxidising agents. Metals.

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:

NONYLPHENOL

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

TRIMETHYLHEXAN-1,6-DIAMINE

ORAL	RAT	LD50	910	mg/kg
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AMINES, COCO ALKYL

ORAL	RAT	LD50	1300	mg/kg
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2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

ORL	RAT	LD50	1200	mg/kg
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SKN	RAT	LD50	1280	mg/kg
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Relevant hazards for substance:

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

Symptoms / routes of exposure

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

Eye contact: There may be severe pain. Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. There may be soreness and redness of the mouth and throat. 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:

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

AMINES, COCO ALKYL

Daphnia magna	48H EC50	<1	mg/l
GOLDEN ORFE (Leuciscus idus)	96H LC50	<1	mg/l
GREEN ALGA (Selenastrum capricornutum)	72H EC50	<1	mg/l

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

[cont...]

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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: No data available.

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: POLYAMINES, LIQUID, CORROSIVE, N.O.S.
(Contains: Nonylphenol; Trimethylhexan-1,6-diamine; 2,4,6-Tris(dimethylamionmethyl) 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: No

14.6. Special precautions for user

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.

[cont...]

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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.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

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.