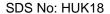
Revision No: 3







SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifier

Product name EpoxyPlus EX (hardener component part B)

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

Identified uses Two component epoxy based adhesive.

1.3 Details of the supplier of the safety data sheet

Supplier Leviat Limited

The Mille

1000 Great West Road (10th Floor)

Brentford

London TW8 9DW

Tel: +44 (0)20 8735 5200 Fax: +44 (0)20 8735 5201

Email: sales.helifix.uk@leviat.com

Contact person sales.helifix.uk@leviat.com

1.4 Emergency telephone number

+44 (0)20 8735 5200 (Mon – Fri 09:00 – 17:00)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Corr. 1A – H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 – H412

Human health Corrosive. Prolonged contact causes serious eye and tissue damage.

Environmental The product contains a substance which may have hazardous effects on the environment.

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Revision No: 3





5-10%

SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

Precautionary statements

P270 Avoid release to the environment.

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

P261 Avoid breathing vapour / spray.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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.

Contains STYRENATED PHENOL, 2-PIPERAZIN-1- YLETHYLAMINE, 1,3-

CYCLOHEXANEBIS(METHYLAMINE), SALICYCLIC ACID,

Supplementary precautionary statements

P264 Wash contaminated skin thoroughly after handling.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.

P402 Store in a dry place.

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

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

CRYSTALINE SILICA 20-50%

CAS number: 14808-60-7 **EC number:** 238-878-4

Classification STOT RE 2 – H373

STYRENATED PHENOL 10-20%

CAS number: 61788-44-1 **EC** number: 262-975-0 **REACH** registration number: 01-2119979575-18-XXXX

Classification
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1A – H317
Aquatic Chronic 2 – H411

2-PIPERAZIN-1-YLETHYLAMINE 5-10%

CAS number: 140-31-8 EC number: 205-411-0 REACH registration number: 01-2119471486-30-XXXX

Classification
Acute Tox. 4 - H302
Acute Tox. 3 - H311
Eye Dam. 1 - H318
Skin Sens. 1B - H317
Aquatic Chronic 3 - H412

1,3-CYCLOHEXANEBIS(METHYLAMINE)

CAS number: 2579-20-6 **EC** number: 219-941-5 **REACH** registration number: 01-2119543741-41-XXXX

Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312

Revision No: 3





A CRH COMPANY

SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

Skin Corr. 1A - H314 Eye Dam. 1 - H318 Aquatic Chronic 3 - H412

SALICYLIC ACID 1-5%

CAS number: 69-72-7 EC number: 200-712-3 REACH registration number: 01-2119486984-17-XXXX

Classification Acute Tox. 4 - H302 Eye Dam. 1 - H318

BIS(ISOPROPYL)NAPHTHALENE >0.5%<1.0%

CAS number: 38640-62-9 **EC** number: 246-052-6 **REACH** registration number: 01-2119565150-48-XXXX

M factor (Chronic) = 1 Classification Asp. Tox. 1 - H304 Aquatic Chronic 1 - H410

The full text for all Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation Remove affected person from source of contamination. Get medical attention if any discomfort

continues.

Ingestion DO NOT induce vomiting. Get medical attention immediately.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Get medical

attention if any discomfort continues.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes. Get medical attention if irritation persists after

washing. Show this Safety Data Sheet to the medical personnel.

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

Inhalation Irritation of nose, throat and airway.

Ingestion May cause stomach pain or vomiting.

Skin contact Burning pain and severe corrosive skin damage. Blistering may occur. Chemical burns.

Eye contact May cause blurred vision and serious eye damage.

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

Notes for the doctorNo specific recommendations. If in doubt, get medical attention promptly.

Revision No: 3





SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing

media

Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

Unsuitable extinguishing

DO NOT use water if avoidable.

Media

5.2. Special hazards arising from the substance or mixture

Specific hazards No unusual fire or explosion hazards noted.

Hazardous combustion

Oxides of carbon. Oxides of nitrogen.

products

5.3. Advice for firefighters

Protective actions during

firefighting

No specific firefighting precautions known.

Special protective

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

equipment for firefighters clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions

Collect and dispose of spillage as indicated in Section 13. Contain spillage with sand, earth or other suitable non-combustible material. Avoid discharge into drains or watercourses or onto

the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Collect and place in suitable waste disposal containers and seal securely. For waste disposal,

see Section 13.

6.4. Reference to other sections

Reference to other

For personal protection, see Section 8. Collect and dispose of spillage as indicated in Section

sections

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin. Avoid contact with eyes. Do not empty into drains.

Revision No: 3





SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

Advice on general occupational hygiene

Do not eat, drink or smoke when using this product. No specific hygiene procedure recommended but good personal hygiene practices should always be observed when working with chemical products.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from food and drink. Keep container closed when not in use.

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

Occupational exposure limits

1,3-CYCLOHEXANEBIS(METHYLAMINE)

Long-term exposure limit (8-hour TWA): WEL 0.1 ppm(Sk) 0.8 mg/m³(Sk)

Sk

WEL = Workplace Exposure Limit Sk = Can be absorbed through skin.

2-PIPERAZIN-1-YLETHYLAMINE (CAS: 140-31-8)

DNEL REACH dossier information

Industry - Inhalation; Long term systemic effects: 3.6 mg/m3 Industry - Inhalation; Short term systemic effects: 21.4 mg/m3 Industry - Dermal; Long term systemic effects: 3.3 mg/kg/day Industry - Dermal; Short term systemic effects: 20 mg/kg/day Industry - Dermal; Long term local effects: 0.006 mg/kg/day Industry - Dermal; Short term local effects: 0.04 mg/kg/day

PNEC REACH dossier information

Fresh water; 0.058 mg/l
Marine water; 0.0058 mg/l
Intermittent release; 0.58 mg/l

- STP; 250 mg/l

Sediment (Freshwater); 215 mg/kgSediment (Marinewater); 21.5 mg/kg

- Soil; 42.9 mg/kg

STYRENATED PHENOL (CAS: 61788-44-1)

DNEL REACH dossier information

Industry - Inhalation; Long term systemic effects: 0.734649123 mg/m³ Industry - Dermal; Long term systemic effects: 0.416666667 mg/kg/day

PNEC REACH dossier information

Fresh water; 0.001371 mg/lMarine water; 0.0001371 mg/l

Page 5 of 14

Revision No: 3





A CRH COMPANY

SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

- Intermittent release; 0.01371 mg/l

- STP; 1.0638 mg/l

Sediment (Freshwater); 43.65269484 mg/kgSediment (Marinewater); 43.65269484 mg/kg

- Soil; 20.64517608 mg/kg

1,3-CYCLOHEXANEBIS(METHYLAMINE) (CAS: 2579-20-6)

REACH dossier information

DNEL Industry - Inhalation; Long term systemic effects: 0.71 mg/m³

Industry - Inhalation; Short term systemic effects: 21.2 mg/m³ Industry - Dermal; Long term systemic effects: 0.2 mg/kg/day Industry - Dermal; Short term systemic effects: 6 mg/kg/day

PNEC REACH dossier information

- Fresh water; 0.0331 mg/l - Marine water; 0.00331 mg/l - Intermittent release; 0.331 mg/l

- STP; 10 mg/l

SALICYLIC ACID (CAS: 69-72-7)

DNEL REACH dossier information

Industry - Inhalation; Long term systemic effects: 16 mg/m³ Industry - Dermal; Long term systemic effects: 2 mg/kg/day

PNEC REACH dossier information

Fresh water; 0.2 mg/lMarine water; 0.02 mg/lIntermittent release; 1 mg/l

- STP; 162 mg/l

Sediment (Freshwater); 1.42 mg/kgSediment (Marinewater); 0.142 mg/kg

- Soil; 0.166 mg/kg

BIS(ISOPROPYL)NAPHTHALENE (CAS: 38640-62-9)

DNEL Workers - Inhalation; Long term systemic effects: 30 mg/m³

Workers - Dermal; Long term systemic effects: 4.3 mg/kg/day

REACH dossier information

DMEL Workers – Inhalation; Long term systemic effects: 300 mg/m³

REACH dossier information

PNEC - Fresh water; 0.26 μg/L

- Marine water; 0.026 µg/L

- STP; 015 mg/l

- Sediment (Freshwater); 0.94 mg/kg

Revision No: 3





SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

- Sediment (Marinewater); 0.094 mg/l

8.2. Exposure controls Protective equipment







Appropriate engineering

controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure

limits for the product or ingredients.

Eye/face protection The following protection should be worn: Tight-fitting safety glasses. Contact lenses should not

be worn when working with this chemical.

Hand protection Wear protective gloves made of the following material: Nitrile rubber.

Other skin and body

protection

Avoid contact with skin. Wear appropriate clothing to prevent repeated or prolonged skin

contact.

Hygiene measures Do not eat, drink or smoke when using this product. Wash at the end of each work shift and

before eating, smoking and using the toilet. Use engineering controls to reduce air

contamination to permissible exposure level.

Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure

controls

Keep container tightly sealed when not in use. Residues and empty containers should be

taken care of as hazardous waste according to local and national provisions.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties Liquid

Appearance

Brownish.

Colour

Odour Characteristic, Amine.

Odour threshold Not determined.

рΗ Not applicable.

Melting point Not determined.

Initial boiling point and

range

Not determined.

Flash point >100°C CC (Closed cup). Literature

Evaporation rate Not determined.

Revision No: 3





SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

Evaporation factor Not determined.

Flammability (solid, gas) Not determined.

Upper/lower flammability

or explosive limits

Not determined.

Other flammability Not applicable.

Vapour pressure Not determined.

Vapour density Not determined.

Relative density 1.75 - 1.85

Bulk density Not available.

Solubility(ies) Not determined.

Partition coefficient Not determined.

Auto-ignition temperature Not determined.

Decomposition Temperature

Not determined.

Viscosity

> 60 S ISO2431

Explosive properties

No information available.

Explosive under the

influence of a flame

Not considered to be explosive.

Oxidising properties

Does not meet the criteria for classification as oxidising.

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity The following materials may react with the product: Acids. Epoxides. Oxidising agents.

Peroxides.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions

The following materials may react with the product: Acids. Epoxides. Oxidising agents

Peroxides.

10.4. Conditions to avoid

Conditions to avoid Stable. However, may decompose if heated.

Revision No: 3





SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

10.5. Incompatible materials

Materials to avoid Acids. Epoxides. Oxidising agents. Peroxides.

10.6. Hazardous decomposition products

Hazardous decomposition Oxides of carbon. Oxides of nitrogen.

products

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 3,171.42

Acute toxicity - dermal

ATE dermal (mg/kg) 3,819.06

Skin sensitisation

Skin sensitisation Sensitising.

Inhalation Vapour may irritate respiratory system/lungs.

Ingestion May cause stomach pain or vomiting.

Skin contact May cause sensitisation by skin contact. May cause serious chemical burns to the skin.

Eye contact Risk of serious damage to eyes. May cause chemical eye burns.

Acute and chronic

health hazards

May cause sensitisation by skin contact. Causes severe burns.

Route of entry Skin and/or eye contact Inhalation

No specific target organs known. **Target organs**

Medical symptoms Symptoms following overexposure may include the following: Chemical burns.

Medical considerations Splash in eye requires examination by eye specialist.

Toxicological information on ingredients

2-PIPERAZIN-1-YLETHYLAMINE

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

1,470.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal

866.0

(LD₅₀ mg/kg)

Rabbit **Species**

300.0 ATE dermal (mg/kg)

Revision No: 3





SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

STYRENATED PHENOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀

mg/kg)

2,000.0

Species

Rat

Acute toxicity - dermal

Acute toxicity dermal

2,000.0

(LD₅₀ mg/kg)

Species Rat

1,3-CYCLOHEXANEBIS(METHYLAMINE)

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

700.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal

(LD₅₀ mg/kg)

1,700.0

Species Rabbit

SALICYLIC ACID

Acute toxicity - oral

Acute toxicity oral (LD50

mg/kg)

891.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal

(LD₅₀ mg/kg)

2,000.0

Species Rat

BIS(ISOPROPYL)NAPHTHALENE

Acute toxicity - oral

Acute toxicity oral (LD50

4,130.0

mg/kg)

Species Rat

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecological information on ingredients.

2-PIPERAZIN-1-YLETHYLAMINE

LC50, 96 hours: 2190 mg/l, Pimephales promelas (Fat-head Minnow) Acute toxicity - fish

LC50, 96 hours: 368 mg/l, Poecilia reticulate (Guppy)

Page 10 of 14

Revision No: 3





SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

Acute toxicity - aquatic

EC₅₀, 48 hours: 32 mg/l, Daphnia magna

invertebrates

Acute toxicity - aquatic EC₅₀, 48 hours: 494 mg/l, Selenastrum capricornutum

plants

STYRENATED PHENOL

Acute toxicity - fish LC50, 96 hours: 14.8 mg/l,

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 1-10 mg/l, Daphnia magna

Acute toxicity - aquatic plants

EC₅₀, 72 hours: 3.14 mg/l, Scenedesmus subspicatus

Chronic aquatic toxicity

NOEC $0.01 < NOEC \le 0.1$

1,3-CYCLOHEXANEBIS(METHYLAMINE)

LC50, > 96 hours: 100 mg/l, Leuciscus idus (Golden orfe) Acute toxicity - fish

Acute toxicity - aquatic

EC₅₀, 48 hours: 29 mg/l, Daphnia magna invertebrates

Acute toxicity - aquatic

plants

 EC_{50} , > 96 hours: 100 mg/l, Scenedesmus subspicatus

Acute toxicity – terrestrial EC₅₀, > 14 days: 1000 mg/kg, Eisenia Fetida (Earthworm)

SALICYLIC ACID

Acute toxicity - fish LC50, 48 hours: 90 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity microorganisms EC₅₀, > 3 hours: 3200 mg/l, Activated sludge

12.2. Persistence and degradability

Persistence and

There are no data on the degradability of this product.

degradability

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

12.4. Mobility in soil

Mobility Mobile. The product is miscible with water and may spread in water systems.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB This product does not contain any substances classified as PBT or vPvB

assessment

12.6. Other adverse effects

Revision No: 3





SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

General information Residues and empty containers should be taken care of as hazardous waste according to

local and national provisions.

Disposal methods Dispose of waste via a licensed waste disposal contractor.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID) 2735

UN No. (IMDG) 2735

UN No. (ICAO) 2735

UN No. (ADN) 2735

14.2. UN proper shipping name

Proper shipping name

(ADR/RID)

AMINES, LIQUID, CORROSIVE, N.O.S. (User to define)

Proper shipping name

(IMDG)

AMINES, LIQUID, CORROSIVE, N.O.S. (User to define)

Proper shipping name

(ICAO)

AMINES, LIQUID, CORROSIVE, N.O.S. (User to define)

Proper shipping name

(ADN)

AMINES, LIQUID, CORROSIVE, N.O.S. (User to define)

14.3. Transport hazard class(es)

ADR/RID class 8

ADR/RID classification code C7

ADR/RID label 8

IMDG class 8

ICAO class/division 8

ADN class 8

Transport labels



Revision No: 3





SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

SDS No: HUK18

14.4. Packing group

ADR/RID packing group ||

IMDG packing group ||

AND packing group

ICAO packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-A, S-B

ADR transport category 2

Emergency Action Code 2X

Hazard Identification

80

Number

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according Not applicable

to Annex II Of MARPOL 73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

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

EU legislation (EU) No 2015/830

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision date 25/04/2022

Revision 3 SDS number HUK20

Hazard statements in full

H302 Harmful if swallowed

H304 May be fatal if swallowed and enters airways

H311 Toxic in contact with skin. H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

Revision No: 3



SDS No: HUK18



SAFETY DATA SHEET EpoxyPlus EX (hardener component part B)

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.