SAFETY DATA SHEET
CrackBond TE *(hardener component)*

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

1.1 Product Identifier

Product name CrackBond TE *(hardener component)*

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 Acute Tox. 4 - H302 Skin Corr. 1B - 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

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe vapours.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501 Dispose of contents/container in accordance with national regulations.

Contains BENZYL ALCOHOL, REACTION PRODUCTS OF 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE AND 4,4'ISOPROPYLIDENEDIPHENOL, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE, 1,3-BENZENEDIMETHANAMINE

Supplementary precautionary statements

P264 Wash contaminated skin thoroughly after handling.
P273 Avoid release to the environment.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

BENZYL ALCOHOL **20-50%**
CAS number: 100-51-6 **EC number:** 202-859-9 **REACH registration number:** 01-2119492630-38-XXXX
Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H332
Eye Irrit. 2 - H319

REACTION PRODUCTS OF 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE AND 4,4'ISOPROPYLIDENEDIPHENOL, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE **20-50%**
CAS number: —
Classification
Skin Corr. 1B - H314
Eye Dam. 1 – H318
Skin Sens. 1 - H317
Aquatic Chronic 3 - H412

1,3-BENZENEDIMETHANAMINE **10-20%**
CAS number: 1477-55-0 **EC number:** 216-032-5 **REACH registration number:** 01-2119480150-50-XXXX
Classification Acute Tox. 4 - H302
Acute Tox. 4 - H332
Skin Corr. 1B - H314
Skin Sens. 1B - H317
Aquatic Chronic 3 - H412

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 doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

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

Unsuitable extinguishing media DO NOT use water if avoidable.

5.2. Special hazards arising from the substance or mixture

Specific hazards No unusual fire or explosion hazards noted.

Hazardous combustion products	Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	No specific firefighting precautions known
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective 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 sections	For personal protection, see Section 8. Collect and dispose of spillage as indicated in Section 13.

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.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. No specific hygiene procedures 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

BENZYL ALCOHOL (CAS: 100-51-6)

DNEL

Industry - Inhalation; Long term systemic effects: 90 mg/m^3
Industry - Dermal; Long term systemic effects: 9.5 mg/kg/day
Industry - Dermal; Short term systemic effects: 47 mg/kg/day
Industry – Inhalation; Short term systemic effects: 450mg/m^3

PNEC

- Fresh water; 1.0 mg/l
- Marine water; 0.1 mg/l
- Sediment (Freshwater); 5.27 mg/kg
- Sediment (Marinewater); 0.57 mg/kg
- Soil; 0.456 mg/kg
- STP; 39 mg/l
- Intermittent release; 2.3 mg/l

1,3-BENZENEDIMETHANAMINE (CAS: 1477-55-0)

PNEC

- Fresh water; 0.094 mg/l
- Marine water; 0.0094 mg/l
- Intermittent release; 0.152 mg/l
- STP; 10 mg/l
- Sediment (Freshwater); 0.43 mg/kg
- Sediment (Marinewater); 0.043 mg/kg
- Soil; 0.045 mg/kg

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

Appearance	Liquid
Colour	Yellowish.
Odour	Characteristic. Amine.
Odour threshold	Not determined.
pH	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.
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	~ 1.0
Bulk density	Not available.
Solubility(ies)	Not determined.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.

Decomposition Temperature.	Not determined
Viscosity	Not determined.
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.

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon. Oxides of nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 1,012.54

Acute toxicity – inhalation

ATE inhalation (vapours mg/l) 25.88

ATE inhalation (dusts/mists mg/l) 8.93

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
Target organs	No specific target organs known.
Medical symptoms	Symptoms following overexposure may include the following: Chemical burns.
Medical considerations	Splash in eye requires examination by eye specialist.

BENZYL ALCOHOL

Acute toxicity - oral	
Acute toxicity oral (LD50 mg/kg)	1,040.0
Species	Rabbit
ATE oral (mg/kg)	500.0
Acute toxicity – dermal	2,000.0
Acute toxicity dermal (LD50 mg/kg)	
Species	Rabbit
Acute toxicity – inhalation	
ATE inhalation (vapours mg/l)	11.0

1,3-BENZENEDIMETHANAMINE

Acute toxicity - oral	
Acute toxicity oral (LD50 mg/kg)	1,090.0
Species	Rat
ATE oral (mg/kg)	1,090.0
Acute toxicity - dermal	
Acute toxicity dermal (LD50 mg/kg)	2,000.0
Species	Rat
Acute toxicity - inhalation	
Acute toxicity inhalation (LC50 dust/mist mg/l)	1.34
Species	Rat
ATE inhalation (dusts/mists mg/l)	1.34

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

BENZYL ALCOHOL

Acute toxicity – fish	LC50, 96 hours: 10 mg/l, Lepomis macrochirus (Bluegill) LC50, 96 hours: 645 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 400 mg/l, Daphnia magna
Acute toxicity - aquatic Plants	EC_{50}, 3 hours: 79 mg/l, Scenedesmus subspicatus EC_{50}, 96 hours: 640 mg/l, Scenedesmus subspicatus
Acute toxicity – microorganisms	EC_{50}, 48 hours: 2100 mg/l, Activated sludge

REACTION PRODUCTS OF 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE AND 4,4'ISOPROPYLIDENEDIPHENOL, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE

Acute toxicity – fish	LL_{50}, 96 hours: 70.7 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EL50, 48 hours: 11.1 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EL50, 72 hours: 79.4 mg/l, Pseudokirchneriella subcapitata
Acute toxicity – microorganisms	LC_{50}, 3 hours: >1000 mg/l, Activated sludge

1,3-BENZENEDIMETHANAMINE

Acute toxicity – fish	LC50, 96 hours: 75 mg/l, Leuciscus idus (Golden orfe)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 15.2 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 12 mg/l, Scenedesmus subspicatus

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.

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

12.6. Other adverse effects

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.
Proper shipping name (IMDG)	AMINES, LIQUID, CORROSIVE, N.O.S.
Proper shipping name (ICAO)	AMINES, LIQUID, CORROSIVE, N.O.S.
Proper shipping name (ADN)	AMINES, LIQUID, CORROSIVE, N.O.S.

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

14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II

ADN packing group II

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 Number (ADR/RID)	80
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 environment 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	HUK2

Hazard statements in full

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.