



**SAFETY DATA SHEET
ATLANTEAK 2.0 EPOXY ADHESIVE PART B**

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

1.1. Product identifier

Product name ATLANTEAK 2.0 EPOXY ADHESIVE PART B
Product number AA-000320
UFI UFI: 9NA0-N081-W00S-EFXV

EU REACH registration notes All chemicals used in this product have been registered under REACH where required.

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

Identified uses Hardener.

1.3. Details of the supplier of the safety data sheet

Supplier Tiflex Ltd
 Tiflex House
 Treburgie Water
 Liskeard
 Cornwall
 PL14 4NB
 Tel: +44 (0) 1579 320 808
 Fax: +44 (0) 1579 320 802
 Email: sward@tiflex.co.uk

1.4. Emergency telephone number

Emergency telephone +44 (0) 1579 320 808 (NOT 24HRS - 9am-5pm Mon-Thurs, 9am-4pm Fri)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (SI 2019 No. 720)

Physical hazards Not Classified
Health hazards Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317
Environmental hazards Aquatic Chronic 3 - H412

Human health See Section 11 for additional information on health hazards. Corrosive to skin and eyes. Prolonged contact may cause burns. May cause serious eye damage.

Environmental The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Physicochemical When handled correctly, undamaged units represent no danger.

2.2. Label elements

ATLANTEAK 2.0 EPOXY ADHESIVE PART B

Hazard pictograms



Signal word

Danger

Hazard statements

H312 Harmful in contact with skin.
 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 vapour/ spray.
 P261 Avoid breathing vapour/ spray.
 P264 Wash contaminated skin thoroughly after handling.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 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 or shower.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/ doctor.
 P312 Call a POISON CENTRE/doctor if you feel unwell.
 P321 Specific treatment (see medical advice on this label).
 P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P363 Wash contaminated clothing before reuse.
 P405 Store locked up.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

ATBN Polymer, ISOPHORONEDIAMINE, 2-PIPERAZIN-1-YLETHYLAMINE, PARATERTIARYBUTYLPHENOL

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ATBN Polymer

35-50%

CAS number: —

Classification

Skin Sens. 1 - H317

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BENZYL ALCOHOL	20-35%
CAS number: 100-51-6	EC number: 202-859-9
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2 - H319	
ISOPHORONEDIAMINE	10-20%
CAS number: 2855-13-2	EC number: 220-666-8
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	
2-PIPERAZIN-1-YLETHYLAMINE	1-5%
CAS number: 140-31-8	EC number: 205-411-0
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412	
PARATERTIARYBUTYLPHENOL	1-5%
CAS number: 98-54-4	EC number: 202-679-0
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Repr. 2 - H361f STOT SE 3 - H335 Aquatic Chronic 2 - H411	
ETHANEDIOL	<1%
CAS number: 107-21-1	EC number: 203-473-3
Classification Acute Tox. 4 - H302	

The full text for all hazard statements is displayed in Section 16.

Chemical Nature

chemical nature

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SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Chemical burns must be treated by a physician. Chemical burns must be treated by a physician.
Inhalation	Move affected person to fresh air at once. Rinse nose and mouth with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Keep affected person warm and at rest. Get medical attention immediately.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention immediately.
Skin contact	Remove affected person from source of contamination. Rinse immediately with plenty of water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

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

General information	Chemical burns must be treated by a physician.
Inhalation	Irritation of nose, throat and airway.
Ingestion	May cause chemical burns in mouth and throat.
Skin contact	May cause serious chemical burns to the skin.
Eye contact	Irritation of eyes and mucous membranes.

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.
Specific treatments	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	None known.

5.2. Special hazards arising from the substance or mixture

Specific hazards	In case of fire: Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of nitrogen.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

5.3. Advice for firefighters

Protective actions during firefighting	Thermal decomposition or combustion products may include the following substances: Toxic and corrosive gases or vapours. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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Special protective equipment for firefighters Use air-supplied respirator, gloves and protective goggles. Wear chemical protective suit.

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.

For non-emergency personnel Wear protective clothing as described in Section 8 of this safety data sheet.

For emergency responders Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb in vermiculite, dry sand or earth and place into containers. Avoid contamination of ponds or watercourses with washing down water.

6.4. Reference to other sections

Reference to other sections The product contains a substance which is hazardous to aquatic organisms and which may cause long term adverse effects in the aquatic environment. See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Wear protective clothing, gloves, eye and face protection.

Advice on general occupational hygiene When using do not eat, drink or smoke. Provide eyewash station. Provide shower facilities near the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at temperatures between 5°C and 25°C.

Storage class Corrosive storage.

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

ETHANEDIOL

Short-term exposure limit (15-minute): 40 104

BENZYL ALCOHOL (CAS: 100-51-6)

DNEL Industry - Dermal; Long term : 9.5 mg/kg/day
Industry - Inhalation; : 90 mg/m³

PNEC - Fresh water; 1 mg/l
- marine water; 0.1 mg/l

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ISOPHORONEDIAMINE (CAS: 2855-13-2)

DNEL Workers - ; : 20.1 mg/m³

PNEC - Fresh water; 0.06 mg/l

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

DNEL Workers - Dermal; : 20 mg/kg/day

Workers - Inhalation; : 21.4 mg/m³

PNEC - Fresh water; 0.058 mg/l
- marine water; 0.0058 mg/l

PARATERTIARYBUTYLPHENOL (CAS: 98-54-4)

PNEC - Soil; 0.324 mg/kg
- Fresh water; 0.01 mg/l
- Sediment (Freshwater); 0.975 mg/l
- Sediment (Marinewater); 0.0975 mg/l

2,4,6-tris(dimethylaminomethyl)phenol (CAS: 90-72-2)

DNEL Workers - Inhalation; : 0.31 mg/m³

PNEC - Fresh water; 0.84 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Wear tight-fitting, chemical splash goggles or face shield.

Hand protection

Wear protective gloves made of the following material: Nitrile rubber. Viton rubber (fluoro rubber). Polyvinylidene chloride/polyethylene (PVDC/PE). To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. When used with mixtures, the protection time of gloves cannot be accurately estimated. The selected gloves should have a breakthrough time of at least 6 hours.

Other skin and body protection

Wear appropriate clothing to prevent skin contamination. Provide eyewash station.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes wet or contaminated.

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Respiratory protection	Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Ensure all respiratory protective equipment is suitable for its intended use and is 'UKCA'-marked. Wear self-contained breathing apparatus with full facepiece.
Thermal hazards	Contact with hot product can cause serious thermal burns. To protect hands from high temperatures, suitable thermal gloves should be used.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Coloured paste.
Colour	Amber.
Odour	Amine.
pH	No information available.
Melting point	No information required.
Flash point	Not known.
Evaporation rate	Not applicable.
Evaporation factor	No information required.
Flammability (solid, gas)	Technically not feasible.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	No information available.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	1.00 @ 25°C
Bulk density	Not relevant.
Partition coefficient	Not known.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Thixotropic
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not known.
Comments	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures.

9.2. Other information

Other information	No information required.
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Refractive index	Not applicable.
Particle size	Not relevant.
Molecular weight	Not applicable.
Saturation concentration	Not applicable.
Critical temperature	Not relevant.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Organic peroxides/hydroperoxides.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid The following materials may react violently with the product: Strong oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong alkalis. Organic peroxides/hydroperoxides.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 3,968.29

Acute toxicity - dermal

ATE dermal (mg/kg) 1,572.66

Acute toxicity - inhalation

ATE inhalation (gases ppm) 20,801.07

ATE inhalation (vapours mg/l) 50.85

ATE inhalation (dusts/mists mg/l) 6.93

Skin corrosion/irritation

Skin corrosion/irritation Corrosive to skin.

Serious eye damage/irritation

Serious eye damage/irritation Corrosivity to eyes is assumed.

Ingestion

Causes burns. Harmful if swallowed.

Skin contact

May cause sensitisation by skin contact. Causes severe burns. May cause an allergic skin reaction. Harmful in contact with skin.

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Eye contact Severe irritation, burning and tearing. Causes burns. Causes severe skin burns and eye damage. Causes serious eye damage.

Route of exposure Skin and/or eye contact

Toxicological information on ingredients.

ATBN Polymer

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 15.4

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3.0

Species Rabbit

BENZYL ALCOHOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,230.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

Species Rabbit

ISOPHORONEDIAMINE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,030.0

Species Rat

ATE oral (mg/kg) 1,030.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,850.0

Species Rabbit

ATE dermal (mg/kg) 1,850.0

Hydrophilic Fumed Silica

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,500.0

Species Rat

ATLANTEAK 2.0 EPOXY ADHESIVE PART B**Acute toxicity - dermal****Acute toxicity dermal (LD₅₀ mg/kg)** 2,500.0**Species** Rabbit**ATE dermal (mg/kg)** 2,500.0**Acute toxicity - inhalation****Acute toxicity inhalation (LC₅₀ dust/mist mg/l)** 58.8**Species** Rat**ATE inhalation (dusts/mists mg/l)** 58.8**2-PIPERAZIN-1-YLETHYLAMINE****Acute toxicity - oral****Acute toxicity oral (LD₅₀ mg/kg)** 2,140.0**Species** Rat**Acute toxicity - dermal****Acute toxicity dermal (LD₅₀ mg/kg)** 880.0**Species** Rabbit**PARATERTIARYBUTYLPHENOL****Acute toxicity - oral****Acute toxicity oral (LD₅₀ mg/kg)** 5,660.0**Species** Rat**ATE oral (mg/kg)** 5,660.0**Acute toxicity - dermal****Acute toxicity dermal (LD₅₀ mg/kg)** 4,100.0**Species** Rabbit**ATE dermal (mg/kg)** 4,100.0**ETHANEDIOL****Acute toxicity - oral****Acute toxicity oral (LD₅₀ mg/kg)** 6,000.0**Species** Rat**ATE oral (mg/kg)** 500.0**Acute toxicity - dermal**

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Acute toxicity dermal (LD₅₀) 22,270.0 mg/kg)

Species Rabbit

ATE dermal (mg/kg) 22,270.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 3.96

Species Rat

SECTION 12: Ecological information

Ecotoxicity Dangerous for the environment if discharged into watercourses. The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Ecological information on ingredients.

ATBN Polymer

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 1000 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: > 1000 mg/l, Selenastrum capricornutum

BENZYL ALCOHOL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 460 mg/l, Pimephales promelas (Fat-head Minnow)
LC₅₀, 96 hours: 645 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates EC₅₀, 24 hours: 400 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: 640 mg/l, Scenedesmus subspicatus
EC₅₀, 3 hours: 79 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms EC₅₀, 16 hours: 660 mg/l, Activated sludge

ISOPHORONEDIAMINE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 110 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 23 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 55 mg/l, Scenedesmus subspicatus

Acute toxicity - microorganisms EC₂₀, 18 hours: 1120 mg/l, Activated sludge

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Hydrophilic Fumed Silica

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: > 10,000 mg/l, Freshwater fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 10,000 mg/l, Daphnia magna

PARATERTIARYBUTYLPHENOL

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: > 4.71 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 3.5 mg/l, Daphnia magna

ETHANEDIOL

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: > 46300 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 46,300 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: > 9,600 mg/l, Freshwater algae

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Ecological information on ingredients.

ETHANEDIOL

Biodegradation Water - Degradation (%) 60: > 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential May accumulate in soil and water systems.

Partition coefficient Not known.

12.4. Mobility in soil

Mobility The product is insoluble in water and will sediment in water systems.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Other adverse effects None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

ATLANTEAK 2.0 EPOXY ADHESIVE PART B

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. (CONTAINS ISOPHORONEDIAMINE, Bis(Dimethylamino)methyl phenol)
Proper shipping name (IMDG)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, Bis(Dimethylamino)methyl phenol)
Proper shipping name (ICAO)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, Bis(Dimethylamino)methyl phenol)
Proper shipping name (ADN)	AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS ISOPHORONEDIAMINE, Bis(Dimethylamino)methyl phenol)

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

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Tunnel restriction code (E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716). Control of Substances Hazardous to Health Regulations 2002 (as amended). EH40/2005 Workplace exposure limits.
Guidance	Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. CHIP for everyone HSG228. Approved Classification and Labelling Guide (Sixth edition) L131.
Authorisations (SI 2020 No. 1577 Annex XIV)	No specific authorisations are known for this product.
Restrictions (SI 2020 No. 1577 Annex XVII)	No specific restrictions on use are known for this product.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

ATLANTEAK 2.0 EPOXY ADHESIVE PART B

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 DNEL: Derived No Effect Level.
 GHS: Globally Harmonized System.
 IATA: International Air Transport Association.
 ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC50: Lethal Concentration to 50 % of a test population.
 LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.
 SVHC: Substances of Very High Concern.
 vPvB: Very Persistent and Very Bioaccumulative.
 cATpE: Converted acute toxicity point estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 UN: United Nations.
 IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).

Key literature references and sources for data

Dangerous Properties of Industrial Materials Report, N.Sax et.al.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

28/04/2022

Revision

11

Supersedes date

21/10/2021

SDS number

21775

Hazard statements in full

H302 Harmful if swallowed.
 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.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.
 H361f Suspected of damaging fertility.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

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.