



## SAFETY DATA SHEET CONBEXTRA EPR HARDENER

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

#### 1.1. Product identifier

Product name	CONBEXTRA EPR HARDENER
Product number	A1168002UK9, A1168004UK9
UFI	UFI: QPJ0-K0V8-X00V-AF0P

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

Identified uses	Hardener component of three-part epoxy grout.
-----------------	---

#### 1.3. Details of the supplier of the safety data sheet

Manufacturer	Fosroc International Limited Drayton Manor Business Park Coleshill Road Tamworth Staffordshire B78 3XN England Tel: +44 (0) 1827 262222 Fax: +44 (0) 1827 262444 enquiryuk@fosroc.com
--------------	--

#### 1.4. Emergency telephone number

Emergency telephone	+44 (0) 1827 265 279 (Monday-Sunday 24 hours a day)
---------------------	---

### 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 Acute Tox. 4 - H312 Skin Corr. 1A - H314 Eye Dam. 1 - H318 STOT SE 3 - H335
Environmental hazards	Not Classified

#### 2.2. Label elements

##### Hazard pictograms



Signal word	Danger
-------------	--------

Hazard statements	H302+H312 Harmful if swallowed or in contact with skin. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation.
-------------------	--

## CONBEXTRA EPR HARDENER

<b>Precautionary statements</b>	<p>P260 Do not breathe vapour/ spray.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
<b>Contains</b>	1,5-PENTANEDIAMINE, 2-METHYL, PARA TOLUENE SULPHONIC ACID MONOHYDRATE
<b>Supplementary precautionary statements</b>	<p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash it before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p>

### 2.3. Other hazards

None known.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>1,5-PENTANEDIAMINE, 2-METHYL</b>	<b>60-100%</b>
CAS number: 15520-10-2	EC number: 239-556-6
	REACH registration number: 01-2119976310-41-0000
<b>Classification</b>	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Acute Tox. 4 - H332	
Skin Corr. 1A - H314	
Eye Dam. 1 - H318	
STOT SE 3 - H335	
<b>PARA TOLUENE SULPHONIC ACID MONOHYDRATE</b>	<b>1-5%</b>
CAS number: 6192-52-5	EC number: 203-180-0
<b>Classification</b>	
Skin Irrit. 2 - H315	
Eye Irrit. 2 - H319	
STOT SE 3 - H335	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## CONBEXTRA EPR HARDENER

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Get medical attention if any discomfort continues.
<b>Inhalation</b>	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention immediately.
<b>Skin contact</b>	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
<b>Eye contact</b>	Remove affected person from source of contamination. Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention immediately.

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

<b>General information</b>	Get medical attention promptly if symptoms occur after washing.
<b>Inhalation</b>	May cause respiratory irritation. May cause coughing and difficulties in breathing.
<b>Ingestion</b>	May cause chemical burns in mouth and throat.
<b>Skin contact</b>	May cause sensitisation by skin contact. May cause serious chemical burns to the skin.
<b>Eye contact</b>	Eye contact may cause serious and potentially irreversible injuries.

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

<b>Notes for the doctor</b>	Treat symptomatically.
-----------------------------	------------------------

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

<b>Hazardous combustion products</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of nitrogen.
--------------------------------------	--

#### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. In case of fire and/or explosion do not breathe fumes.
<b>Special protective equipment for firefighters</b>	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

<b>Personal precautions</b>	For personal protection, see Section 8. Do not touch or walk into spilled material.
<b>For emergency responders</b>	Keep unnecessary personnel away. Do not touch damaged containers, or spilled material, unless wearing appropriate protective clothing. Remove all sources of ignition.

## CONBEXTRA EPR HARDENER

### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground. Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

### 6.4. Reference to other sections

**Reference to other sections** For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid contact with skin and eyes. Avoid breathing gas, fume, vapours or spray. Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Wash hands thoroughly after handling.

**Advice on general occupational hygiene** Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

### 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. Keep away from food, drink and animal feeding stuffs. Keep away from heat, sparks and open flame.

**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

No exposure limits known for ingredient.

**Ingredient comments** No exposure limits known for ingredient(s).

**Biological limit values** No biological exposure limits noted for the ingredient.

#### 1,5-PENTANEDIAMINE, 2-METHYL (CAS: 15520-10-2)

**DNEL** Industry/Professional - Dermal; Long term : 1.5 mg/kg/day  
Industry/Professional - Inhalation; Short term : 0.5 mg/m<sup>3</sup>  
Industry/Professional - Inhalation; Long term : 0.25 mg/m<sup>3</sup>

**PNEC** Industry/Professional - Fresh water; 0.42 mg/l  
Industry/Professional - Intermittent release; 0.42 mg/l  
Industry/Professional - marine water; 0.42 mg/l

### 8.2. Exposure controls

#### Protective equipment



## CONBEXTRA EPR HARDENER

<b>Appropriate engineering controls</b>	Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.
<b>Eye/face protection</b>	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.
<b>Hand protection</b>	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Polyvinyl chloride (PVC). Nitrile rubber. Viton rubber (fluoro rubber). Protective gloves should have a minimum thickness of 0.4 mm. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.
<b>Other skin and body protection</b>	Wear appropriate clothing to prevent any possibility of skin contact. Wear apron or protective clothing in case of contact.
<b>Hygiene measures</b>	Provide eyewash station and safety shower. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.
<b>Respiratory protection</b>	Respiratory protection may be required if excessive airborne contamination occurs. Gas filter, type K.
<b>Environmental exposure controls</b>	Avoid release to the environment.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Clear.
<b>Odour</b>	Amine.
<b>Odour threshold</b>	Not determined.
<b>pH</b>	Not available.
<b>Melting point</b>	-60 - -56°C/(-76 - -68.8)°F
<b>Initial boiling point and range</b>	192°C/377.6°F
<b>Flash point</b>	83°C / 181°F Method: Tag closed cup.
<b>Evaporation rate</b>	Not available.
<b>Evaporation factor</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	Not available.
<b>Other flammability</b>	Not applicable.
<b>Vapour pressure</b>	0.22 mm Hg @ 20°C
<b>Vapour density</b>	Not available.
<b>Relative density</b>	0.86 g/cm <sup>3</sup> @ 25°C

## CONBEXTRA EPR HARDENER

<b>Bulk density</b>	Not applicable.
<b>Solubility(ies)</b>	Miscible with water.
<b>Partition coefficient</b>	(n-Octanol/Water) <1
<b>Auto-ignition temperature</b>	350°C
<b>Decomposition Temperature</b>	Not available.
<b>Viscosity</b>	3 mPa s @ 22.6°C
<b>Explosive properties</b>	Not available.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

### 9.2. Other information

**Other information** No data available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** Stable at normal ambient temperatures and when used as recommended.

### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** No potentially hazardous reactions known.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition.

### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents. Strong acids.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**ATE oral (mg/kg)** 1,196.32

#### Acute toxicity - dermal

**ATE dermal (mg/kg)** 1,912.07

#### Acute toxicity - inhalation

**ATE inhalation (dusts/mists mg/l)** 5.01

## CONBEXTRA EPR HARDENER

<b>Inhalation</b>	Harmful by inhalation. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.
<b>Ingestion</b>	Harmful if swallowed. May cause burns in mucous membranes, throat, oesophagus and stomach.
<b>Skin contact</b>	Causes burns. Harmful in contact with skin. May cause sensitisation by skin contact.
<b>Eye contact</b>	Causes burns. Risk of serious damage to eyes.
<b>Acute and chronic health hazards</b>	This product is corrosive.

### Toxicological information on ingredients.

#### 1,5-PENTANEDIAMINE, 2-METHYL

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> mg/kg) 1,170.0

Species Rat

ATE oral (mg/kg) 1,170.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> mg/kg) 1,870.0

Species Rabbit

ATE dermal (mg/kg) 1,870.0

##### Acute toxicity - inhalation

Acute toxicity inhalation (LC<sub>50</sub> dust/mist mg/l) 4.9

Species Rat

ATE inhalation (dusts/mists mg/l) 4.9

### SECTION 12: Ecological information

#### 12.1. Toxicity

**Toxicity** The product contains a substance which is harmful to aquatic organisms.

##### Acute aquatic toxicity

**Acute toxicity - fish** EC<sub>50</sub>, : 1825 mg/l, Fish

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hours: 19.8 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hours: >100 mg/l, Algae

### Ecological information on ingredients.

#### 1,5-PENTANEDIAMINE, 2-METHYL

##### Acute aquatic toxicity

**Acute toxicity - fish** Fish 1825 mg/l.

## CONBEXTRA EPR HARDENER

**Acute toxicity - aquatic invertebrates** Crustacea EC50 Daphnia 19.8mg/l, 48 hours.

**Acute toxicity - aquatic plants** Algae EC50 >100mg/l, 72 hours.

### 12.2. Persistence and degradability

**Persistence and degradability** The product is readily biodegradable.

### Ecological information on ingredients.

#### 1,5-PENTANEDIAMINE, 2-METHYL

**Persistence and degradability** The substance is readily biodegradable.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

**Partition coefficient** (n-Octanol/Water) <1

### 12.4. Mobility in soil

**Mobility** 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. This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Waste material and any included combustible absorbent and containers should be suitable for incineration at an approved facility. Note that fully cured material is not considered as hazardous waste.

## 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. (CONTAINS 1,5-PENTANEDIAMINE, 2-METHYL)

**Proper shipping name (IMDG)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,5-PENTANEDIAMINE, 2-METHYL)



## CONBEXTRA EPR HARDENER

**Proper shipping name (ICAO)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,5-PENTANEDIAMINE, 2-METHYL)

**Proper shipping name (ADN)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,5-PENTANEDIAMINE, 2-METHYL)

### 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	I
IMDG packing group	I
ICAO packing group	I
ADN packing group	I

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

IMDG Code segregation group	18. Alkalis
EmS	F-A, S-B
ADR transport category	1
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	88
Tunnel restriction code	(E)

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

**Transport in bulk according to** Not applicable.

**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

**National regulations** The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).

## CONBEXTRA EPR HARDENER

<b>EU legislation</b>	<p>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).</p> <p>Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).</p> <p>Commission Regulation (EU) No 2015/830 of 28 May 2015.</p>
<b>Guidance</b>	<p>Workplace Exposure Limits EH40.</p> <p>Respiratory protective equipment at work (HSG53).</p>

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>Abbreviations and acronyms used in the safety data sheet</b>	<p>ATE: Acute Toxicity Estimate.</p> <p>CAS: Chemical Abstracts Service.</p> <p>DNEL: Derived No Effect Level.</p> <p>DMEL: Derived Minimal Effect Level.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p>
<b>General information</b>	<p>For professional users only. The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.</p>
<b>Revision comments</b>	<p>NOTE: Lines within the margin indicate significant changes from the previous revision.</p>
<b>Revision date</b>	06/10/2021
<b>Revision</b>	6
<b>Supersedes date</b>	27/10/2020
<b>SDS number</b>	12286
<b>Hazard statements in full</b>	<p>H302 Harmful if swallowed.</p> <p>H312 Harmful in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H315 Causes skin irritation.</p> <p>H318 Causes serious eye damage.</p> <p>H319 Causes serious eye irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H335 May cause respiratory irritation.</p>

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.