



## SAFETY DATA SHEET BONDcoat UF (HARDENER COMPONENT)

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

#### 1.1. Product identifier

**Product name** BONDcoat UF (HARDENER COMPONENT)  
**Product number** TM11, TM12, TM58

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

**Identified uses** Epoxy Resin (Hardener Component)

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

**Supplier** PAREX Ltd  
 Holly Lane Industrial Estate  
 Atherstone  
 Warwickshire  
 CV9 2QZ  
 Tel: +44 (0)1827 711755  
 (Mon-Fri 08:30-16:30)  
 Fax: +44 (0)1827 711330  
 sds@parex.co.uk

#### 1.4. Emergency telephone number

**Emergency telephone** + 44 (0)1827 711755 (Mon-Fri 08:30 - 16:30)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (EC 1272/2008)

**Physical hazards** Not Classified  
**Health hazards** Skin Corr. 1C - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317  
**Environmental hazards** Aquatic Chronic 2 - H411

#### 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.  
 H411 Toxic to aquatic life with long lasting effects.

## BONDCOAT UF (HARDENER COMPONENT)

### Precautionary statements

P260 Do not breathe vapour/ spray.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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.  
 P310 Immediately call a POISON CENTER/ doctor.  
 P405 Store locked up.  
 P501 Dispose of contents/ container in accordance with national regulations.

### Contains

TOFA-DimerFA-TETA PAA, 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL, 3-AMINOPROPYLDIMETHYLAMINE, 3-AMINOPROPYLTRIETHOXYSILANE

### 2.3. Other hazards

#### SECTION 3: Composition/information on ingredients

##### 3.2. Mixtures

<b>TOFA-DimerFA-TETA PAA</b> <span style="float: right;"><b>25 - 50%</b></span>		
CAS number: 68082-29-1	EC number: 500-191-5	REACH registration number: 01-2119972320-44-0000
<b>Classification</b> Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411		
<b>BENZYL ALCOHOL</b> <span style="float: right;"><b>10 - 25%</b></span>		
CAS number: 100-51-6	EC number: 202-859-9	REACH registration number: 01-2119492630-38-0000
<b>Classification</b> Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2 - H319		
<b>3-AMINOPROPYLDIMETHYLAMINE</b> <span style="float: right;"><b>2.5 - 10%</b></span>		
CAS number: 109-55-7	EC number: 203-680-9	REACH registration number: 01-2119486842-27-0000
<b>Classification</b> Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317		

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<b>2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL</b>			<b>2.5 - 10%</b>
CAS number: 90-72-2	EC number: 202-013-9	REACH registration number: 01-2119560597-27-0000	
<b>Classification</b>			
Acute Tox. 4 - H302			
Skin Irrit. 2 - H315			
Eye Irrit. 2 - H319			
<b>3-AMINOPROPYLTRIETHOXYSILANE</b>			<b>&lt;=2.5%</b>
CAS number: 919-30-2	EC number: 213-048-4	REACH registration number: 01-2119480479-24-0000	
<b>Classification</b>			
Acute Tox. 4 - H302			
Skin Corr. 1B - H314			
Eye Dam. 1 - H318			
Skin Sens. 1 - H317			

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

**SECTION 4: First aid measures****4.1. Description of first aid measures**

<b>General information</b>	While rinsing, remove clothing not adhering to the affected area.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention.
<b>Ingestion</b>	DO NOT induce vomiting. Get medical attention immediately. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical.
<b>Skin contact</b>	Wash skin thoroughly with soap and water or use an approved skin cleanser. Get medical attention if symptoms are severe or persist after washing.
<b>Eye contact</b>	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

**4.2. Most important symptoms and effects, both acute and delayed****4.3. Indication of any immediate medical attention and special treatment needed**

<b>Notes for the doctor</b>	Treat symptomatically.
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**SECTION 5: Firefighting measures****5.1. Extinguishing media**

<b>Suitable extinguishing media</b>	Carbon dioxide or dry powder. Water jet. Fight larger fires with water jet or alcohol-resistant foam.
<b>Unsuitable extinguishing media</b>	Do not use water with a full water jet.

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

<b>Hazardous combustion products</b>	Toxic gases or vapours.
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### 5.3. Advice for firefighters

**Protective actions during firefighting** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

**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** Do not discharge into drains, water courses or onto the ground.

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

**Methods for cleaning up** Absorb spillage with non-combustible, absorbent material. Collect spillage. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Dispose of contents/container in accordance with national regulations. Ensure adequate ventilation.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Observe good chemical hygiene practices.

**Advice on general occupational hygiene** Wash at the end of each work shift and before eating, smoking and using the toilet.

### 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. Bund storage facilities to prevent soil and water pollution in the event of spillage.

**Storage class** Chemical 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

### 8.2. Exposure controls

#### Protective equipment



**Appropriate engineering controls**

Provide adequate ventilation.

**Eye/face protection**

Ensure that an eye wash station is close at hand. Wear tight-fitting, chemical splash goggles or face shield.

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<b>Hand protection</b>	Wear protective gloves. 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. Wear protective gloves made of the following material: Nitrile rubber. Viton rubber (fluoro rubber). Polyvinyl chloride (PVC). Thickness: At least 0.5 mm
<b>Other skin and body protection</b>	Wear protective clothing.
<b>Hygiene measures</b>	Wash after use and before eating, smoking and using the toilet.
<b>Respiratory protection</b>	Combination filter A-P2
<b>Environmental exposure controls</b>	Keep container tightly sealed when not in use. Store in a demarcated bunded area to prevent release to drains and/or watercourses.

### SECTION 9: Physical and Chemical Properties

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

<b>Appearance</b>	Liquid.
<b>Colour</b>	Dark yellow.
<b>Odour</b>	Amine.
<b>Melting point</b>	Not determined.
<b>Initial boiling point and range</b>	>200C at 760mm Hg
<b>Flash point</b>	76°C
<b>Upper/lower flammability or explosive limits</b>	Lower flammable/explosive limit: 1.3 Vol % Upper flammable/explosive limit: 13.0 Vol %
<b>Bulk density</b>	1.02 kg/l
<b>Solubility(ies)</b>	Immiscible with water.
<b>Auto-ignition temperature</b>	335°C
<b>Viscosity</b>	1000 - 2000 mPa s @ 25°C

#### 9.2. Other information

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

#### 10.2. Chemical stability

**Stability** Stable under the prescribed storage conditions.

#### 10.3. Possibility of hazardous reactions

#### 10.4. Conditions to avoid

#### 10.5. Incompatible materials

**Materials to avoid** Strong oxidising agents.

#### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition or combustion products may include the following substances: Toxic and/or corrosive gases and/or vapours.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Toxicological effects** Causes severe skin burns and eye damage. May cause an allergic skin reaction.

## BONDCOAT UF (HARDENER COMPONENT)

### Acute toxicity - inhalation

ATE inhalation (gases ppm) 25,714.29

ATE inhalation (vapours mg/l) 62.86

ATE inhalation (dusts/mists mg/l) 8.57

### Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns. May cause an allergic skin reaction.

### Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

### Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

### Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

## SECTION 12: Ecological Information

Ecotoxicity Toxic to aquatic life.

### 12.1. Toxicity

Toxicity Toxic to aquatic organisms.

### 12.2. Persistence and degradability

Persistence and degradability No data available.

Biodegradation No information available.

### 12.3. Bioaccumulative potential

Bioaccumulative potential No information available.

### 12.4. Mobility in soil

Mobility No data available.

### 12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment Not relevant.

### 12.6. Other adverse effects

Other adverse effects Not available.

## 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 Collect and place in suitable waste disposal containers and seal securely. Dispose of contents/container in accordance with national regulations.

Waste class EWC 08 00 00 EWC 08 02 00 EWC 08 02 99

## SECTION 14: Transport information

### 14.1. UN number

## BONDCOAT UF (HARDENER COMPONENT)

UN No. (ADR/RID)	2735
UN No. (IMDG)	2735
UN No. (ADN)	2735

### 14.2. UN proper shipping name

Proper shipping name (ADR/RID)	AMINES, LIQUID, CORROSIVE, N.O.S. (N,N-DIMETHYL-1,3-DIAMINOPROPANE, TOFA-DIMERFA-TETA PAA), ENVIRONMENTALLY HAZARDOUS
Proper shipping name (IMDG)	AMINES, LIQUID, CORROSIVE, N.O.S. (N,N-DIMETHYL-1,3-DIAMINOPROPANE, TOFA-DIMERFA-TETA PAA), MARINE POLLUTANT
Proper shipping name (ADN)	AMINES, LIQUID, CORROSIVE, N.O.S. (N,N-DIMETHYL-1,3-DIAMINOPROPANE, TOFA-DIMERFA-TETA PAA), ENVIRONMENTALLY HAZARDOUS

### 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	III
IMDG packing group	III
ADN packing group	III
ICAO packing group	III

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



### 14.6. Special precautions for user

EmS	F-A, S-B
ADR transport category	3
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

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

## BONDCOAT UF (HARDENER COMPONENT)

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

**EU legislation**

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).

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).

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

<b>Issued by</b>	QSHE Manager
<b>Revision date</b>	24/05/2018
<b>Supersedes date</b>	02/05/2018
<b>SDS number</b>	20946
<b>Hazard statements in full</b>	H226 Flammable liquid and vapour. H302 Harmful if swallowed. 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. H411 Toxic 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.