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MATERIAL SAFETY DATA SHEET

FIBERTECH FIXOL



According to Regulation (EC) No 1907/2006, Annex II, as amended.

Supersedes date: 15/05/2018

Revision date: 17/10/2019

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

1.1. Product identifier

Product name CELMEND AQUA

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 2K polymer systems ltd
Venture Crescent
Alfreton
Derbyshire
DE55 7RA, UK
Tel: +44 (0)1773 540440
Fax: +44 (0)1773 607638

Web www.2kps.net

Contact person SDS@2kps.net

1.4. Emergency telephone number

Emergency telephone +44 (0)1773 540440 (Mon - Fri 08:00 - 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 Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

Human health May cause skin sensitisation or allergic reactions in sensitive individuals.

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.



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**Precautionary statements**

P264 Wash contaminated skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P501 Dispose of contents/ container in accordance with national regulations.

Contains

POLY[OXY(METHYL-1,2-ETHANEDIYL)], A-HYDRO- ω -HYDROXY-, ETHER WITH 2,2-BIS(HYDROXYMETHYL)-1,3-PROPANEDIOL (4:1), 2-HYDROXY-3-MERCAPTOPROPYL ETHER, reaction product: bisphenol-A-(epichlorhydrin), TRIETHYLENETETRAMINE

Supplementary precautionary statements

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.

2.3. Other hazards**SECTION 3: Composition/information on ingredients****3.2. Mixtures**

TALC	20-50%
CAS number: 14807-96-6	EC number: 238-877-9
Classification Not Classified	
POLY[OXY(METHYL-1,2-ETHANEDIYL)], A-HYDRO-ω-HYDROXY-, ETHER WITH 2,2-BIS(HYDROXYMETHYL)-1,3-PROPANEDIOL (4:1), 2-HYDROXY-3-MERCAPTOPROPYL ETHER	20-50%
CAS number: 72244-98-5	EC number: 615-735-8
	REACH registration number: 01-2120118957-46
Classification Skin Sens. 1B - H317 Aquatic Chronic 3 - H412	
AMORPHOUS SODA LIME GLASS	20-50%
CAS number: 65997-17-3	EC number: 266-046-0
Classification Not Classified	
reaction product: bisphenol-A-(epichlorhydrin)	5-10%
CAS number: 25068-38-6	EC number: 500-033-5
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	



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**TITANIUM DIOXIDE**

5-10%

CAS number: 13463-67-7

EC number: 236-675-5

Classification

Not Classified

TRIETHYLENETETRAMINE

>0.5 <1.0%

CAS number: 112-24-3

EC number: 203-950-6

Classification

Acute Tox. 4 - H302

Acute Tox. 4 - H312

Skin Corr. 1B - H314

Skin Sens. 1 - H317

Aquatic Chronic 3 - H412

PHENOL

<0.5%

CAS number: 108-95-2

EC number: 203-632-7

M factor (Chronic) = 1

Classification

Acute Tox. 3 - H301

Acute Tox. 3 - H311

Acute Tox. 3 - H331

Skin Corr. 1B - H314

Eye Dam. 1 - H318

Muta. 2 - H341

STOT RE 2 - H373

Aquatic Chronic 1 - H410

The Full Text for all R-Phrases and 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	Wash skin thoroughly with soap and water.
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	No specific symptoms known.
Ingestion	May cause discomfort.
Skin contact	May cause sensitisation or allergic reactions in sensitive individuals. Causes skin irritation.
Eye contact	Causes eye irritation.



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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: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Water spray, foam, dry powder or carbon dioxide.

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 Avoid discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up 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.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions No special storage precautions required.

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

TALC

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³ respirable dust

AMORPHOUS SODA LIME GLASS

Long-term exposure limit (8-hour TWA): 5 mg/m³ dust

TITANIUM DIOXIDE



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Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

PHENOL

Long-term exposure limit (8-hour TWA): WEL 2 ppm 7.8 mg/m³

Short-term exposure limit (15-minute): WEL 4 ppm 16 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

reaction product: bisphenol-A-(epichlorhydrin) (CAS: 25068-38-6)

DNEL	Industry - Inhalation; Long term systemic effects: 12.25 mg/m ³
	Industry - Inhalation; Short term systemic effects: 12.25 mg/m ³
	Industry - Dermal; Long term systemic effects: 8.33 mg/kg/day
	Industry - Dermal; Short term systemic effects: 8.33 mg/kg/day
	REACH dossier information
PNEC	- Fresh water; 0.006 mg/l
	- marine water; 0.0006 mg/l
	- Intermittent release; 0.018 mg/l
	- STP; 10 mg/l
	- Sediment (Freshwater); 0.996 mg/kg
	- Sediment (Marinewater); 0.0996 mg/kg
	- Soil; 0.196 mg/kg
	REACH dossier information

TITANIUM DIOXIDE (CAS: 13463-67-7)

DNEL	Industry - Inhalation; Long term systemic effects: 10 mg/m ³
	REACH dossier information
PNEC	- Fresh water; 0.127 mg/l
	- marine water; 1.0 mg/l
	- Intermittent release; 0.61 mg/l
	- STP; 100 mg/l
	- Sediment (Freshwater); 1000 mg/kg
	- Sediment (Marinewater); 100 mg/kg
	- Soil; 100 mg/kg
	REACH dossier information

TRIETHYLENETETRAMINE (CAS: 112-24-3)

DNEL	Industry - Dermal; Short term systemic effects: 5380 mg/kg/day
	Industry - Inhalation; Long term systemic effects: 1.0 mg/m ³
PNEC	- Fresh water; 0.135 mg/l
	- marine water; 0.0027 mg/l

PHENOL (CAS: 108-95-2)

DNEL	Industry - Inhalation; Long term systemic effects: 8 mg/m ³
	Industry - Inhalation; Short term local effects: 16 mg/m ³
	Industry - Dermal; Long term systemic effects: 1.23 mg/m ³
	REACH dossier information

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PNEC

- Fresh water; 0.0077 mg/l
 - marine water; 0.00077 mg/l
 - Intermittent release; 0.031 mg/l
 - STP; 2.1 mg/l
 - Sediment (Freshwater); 0.0915 mg/kg
 - Sediment (Marinewater); 0.00915 mg/kg
 - Soil; 0.136 mg/kg
- REACH dossier information

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

No specific ventilation requirements.

Eye/face protection

Wear eye protection.

Hand protection

Wear protective gloves.

Hygiene measures

Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection

No specific recommendations.

Environmental exposure controls

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	Solid. Coloured paste.
Colour	Green. White.
Odour	Characteristic. Sulphur.
Odour threshold	Not determined.
pH	Not applicable.
Melting point	Not applicable.
Initial boiling point and range	>35°C @ 760 mm Hg
Flash point	>100°C
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Flammability (solid, gas)	Not determined.
Upper/lower flammability or explosive limits	Not determined.
Vapour pressure	<500 Pa @ 20°C
Vapour density	Not applicable.
Relative density	~ 2



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Bulk density	Not applicable.
Solubility(ies)	Insoluble in water
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not applicable.
Explosive properties	Not applicable.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Conditions to avoid	Avoid contact with the following materials: Acids.
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10.5. Incompatible materials

Materials to avoid	Acids. Amines.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Oxides of carbon. Oxides of nitrogen.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)	25,641.03
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Acute toxicity - dermal

ATE dermal (mg/kg)	161,538.46
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Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	769.23
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Skin sensitisation

Skin sensitisation	Sensitising.
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Ingestion	May cause discomfort.
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Skin contact	May cause sensitisation by skin contact. Causes skin irritation.
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Eye contact	Causes eye irritation.
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Route of exposure	Skin and/or eye contact.
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Toxicological information on ingredients



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TALCCarcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

TITANIUM DIOXIDEAcute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

TRIETHYLENETETRAMINEAcute toxicity - oral

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

ATE dermal (mg/kg) 1,100.0

PHENOLAcute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 317.0

Species Rat

ATE oral (mg/kg) 100.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 630.0

Species Rabbit

ATE dermal (mg/kg) 630.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 3.0

Carcinogenicity

IARC carcinogenicity IARC Group 3 Not classifiable as to its carcinogenicity to humans.

SE

SECTION 12: Ecological information

12.

1. Toxicity

Ec

Ecological information on ingredients.reaction product: bisphenol-A-(epichlorhydrin)Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 2 mg/l, Oncorhynchus mykiss (Rainbow trout)



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**Acute toxicity - aquatic invertebrates**EC₅₀, 48 hours: 1.8 mg/l, Daphnia magna**Acute toxicity - aquatic plants**EC₅₀, 72 hours: 11 mg/l, Freshwater algaeEC₅₀, 96 hours: 220 mg/l, Scenedesmus subspicatus**Chronic aquatic toxicity****Chronic toxicity - aquatic invertebrates**

NOEC, 21 days: 0.3 mg/l, Daphnia magna

TITANIUM DIOXIDE**Acute aquatic toxicity****Acute toxicity - fish**LC₀, >: 1000 mg/l, Leuciscus idus (Golden orfe)
REACH dossier information**Acute toxicity - aquatic invertebrates**NOEC, > 48 hours: 3 mg/l, Daphnia magna
REACH dossier information**Acute toxicity - microorganisms**EC₅₀, > 3 hours: 1000 mg/l, Activated sludge
REACH dossier information**TRIETHYLENETETRAMINE****Acute aquatic toxicity****Acute toxicity - fish**LC₅₀, 96 hours: 330 mg/l, Pimephales promelas (Fat-head Minnow)
LC₅₀, 96 hours: 570 mg/l, Poecilia reticulata (Guppy)**Acute toxicity - aquatic invertebrates**EC₅₀, 48 hours: 31 mg/l, Daphnia magna**Acute toxicity - aquatic plants**EC₅₀, 72 hours: 20 mg/l, Selenastrum capricornutum**Acute toxicity - microorganisms**

, : 800 mg/l, Activated sludge

PHENOL**Acute aquatic toxicity****Acute toxicity - fish**LC₅₀, 96 hours: 67.5 mg/l, Pimephales promelas (Fat-head Minnow)**Chronic aquatic toxicity**

1 M factor (Chronic) 1

2.2. Persistence and degradability**Persistence and degradability** The product is not biodegradable.**Ecological information on ingredients.****reaction product: bisphenol-A-(epichlorhydrin)**

1 Biodegradation - 12% Degradation (%): 28 days

2.3. Bioaccumulative potential**Bioaccumulative potential** No data available on bioaccumulation.**Partition coefficient** Not determined.



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Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin)

Bioaccumulative potential May accumulate in soil and water systems. BCF: 100 - 3000,

Partition coefficient log Pow: 3.242 Estimated Value

12.4. Mobility in soil

Mobility The product is insoluble in water and will spread on the water surface. The product is non-volatile. Semi-mobile.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin)

Mobility Semi-mobile.

Adsorption/desorption coefficient Water - Koc: 1800 - 4400 @ 25°C Estimated Value

Henry's law constant 4.93E-05 Pa m³/mol @ 25°C

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.

Ecological information on ingredients.

reaction product: bisphenol-A-(epichlorhydrin)

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

Waste class The waste code classification is to be carried out according to the European Waste Catalogue (EWC).

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.



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14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

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 comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	17/10/2019
Version number	2.002
Supersedes date	15/05/2018
SDS number	20656
Hazard statements in full	H301 Toxic if swallowed. H302 Harmful if swallowed. 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. H318 Causes serious eye damage. H319 Causes serious eye irritation. H331 Toxic if inhaled. H341 Suspected of causing genetic defects. H373 May cause damage to organs through prolonged or repeated exposure. 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.

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