

ARBOFLEX® PU

LIQUID WATERPROOFING

SAFETY DATA SHEET ARBOFLEX® PU THICKENER

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

1.1. Product identifier

Product name ARBOFLEX® PU THICKENER

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

Identified uses Additive for the polyurethane liquid membrane ARBOFLEX® PU.

Uses advised against Restricted to professional users.

1.3. Details of the supplier of the safety data sheet

Supplier Carlisle Construction Materials Ltd.
Lancaster House, Concorde Way,
Millennium Business Park,
Mansfield, Nottinghamshire,
NG19 7DW
United Kingdom
01623 627285
sds.arbo@ccm-europe.com

1.4. Emergency telephone number

Emergency telephone 01623 627285 (office hours only)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226

Health hazards Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335 STOT RE 2 - H373

Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word

Warning

Hazard statements

H226 Flammable liquid and vapour.
H312+H332 Harmful in contact with skin or if inhaled.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe vapour/ spray.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P312 Call a POISON CENTRE/doctor if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/ attention.

P403+P235 Store in a well-ventilated place. Keep cool.

Contains Xylene

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

Xylene		50 - <75%
CAS number: 1330-20-7	EC number: 215-535-7	REACH registration number: 01-2119488216-32-XXXX
Classification		
Flam. Liq. 3 - H226		
Acute Tox. 4 - H312		
Acute Tox. 4 - H332		
Skin Irrit. 2 - H315		
Eye Irrit. 2 - H319		
STOT SE 3 - H335		
STOT RE 2 - H373		
Asp. Tox. 1 - H304		
Aquatic Chronic 3 - H412		

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information In all cases of doubt, or if symptoms persist, seek medical attention.

Inhalation If inhalation causes adverse effects, remove to fresh air. Get medical attention if any discomfort continues.

Ingestion Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.

Skin contact After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Get medical attention if any discomfort continues.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

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

General information Treat symptomatically.

Inhalation May cause respiratory irritation. Harmful if inhaled.

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Ingestion	No specific symptoms known.
Skin contact	Skin irritation. Harmful in contact with skin.
Eye contact	Causes serious eye irritation.

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

Notes for the doctor	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with foam, carbon dioxide or dry powder.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	Flammable liquid and vapour.
Hazardous combustion products	Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting	Water spray should be used to cool containers. Control run-off water by containing and keeping it out of sewers and watercourses.
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	Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. Wear personal protective equipment (See section 8). No smoking, sparks, flames or other sources of ignition near spillage. In case of spills, beware of slippery floors and surfaces.
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6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste disposal containers and seal securely.
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6.4. Reference to other sections

Reference to other sections	For personal protection, see Section 8. For waste disposal, see Section 13. See Section 11 for additional information on health hazards.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions	For personal protection, see Section 8. Use only outdoors or in a well-ventilated area. Avoid breathing vapour/spray. Avoid contact with skin and eyes. Wash contaminated skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Ground/bond container and receiving equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use only non-sparking tools. Use explosion-proof electrical, ventilating and lighting equipment.
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Advice on general occupational hygiene Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep container tightly closed, in a cool, well ventilated place. Protect from sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

Xylene

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³

Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³

Sk

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Xylene (CAS: 1330-20-7)

Biological limit values	Xylene, o-, m-, p- or mixed isomers: 650 mmol methyl hippuric acid/mol creatinine in urine. Post shift.
DNEL	Workers - Inhalation; Long term systemic effects: 221 mg/m ³ Workers - Inhalation; Short term systemic effects: 442 mg/m ³ Workers - Dermal; Long term systemic effects: 212 mg/kg/day
PNEC	- Fresh water; 0.327 mg/l - marine water; 0.327 mg/l - Intermittent release; 0.327 mg/l - STP; 6.58 mg/l - Sediment (Freshwater); 12.46 mg/kg - Sediment (Marinewater); 12.46 mg/kg - Soil; 2.31 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

This product must not be handled in a confined space without adequate ventilation.

Eye/face protection

Wear approved safety goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374.

Recommendations for gloves:

Polychloroprene - CR: thickness ≥ 0.5 mm; breakthrough time ≥ 480 min.

Nitrile rubber - NBR: thickness ≥ 0.35 mm; breakthrough time ≥ 480 min.

Butyl rubber - IIR: thickness ≥ 0.5 mm; breakthrough time ≥ 480 min.

Fluorinated rubber - FKM: thickness ≥ 0.4 mm; breakthrough time ≥ 480 min.

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Other skin and body protection	Wear appropriate clothing to prevent any possibility of skin contact.
Hygiene measures	Do not eat, drink or smoke when using this product. Take off immediately all contaminated clothing and wash it before reuse. Wash contaminated skin thoroughly after handling.
Respiratory protection	Use respiratory protection where ventilation is insufficient or exposure is prolonged. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit. Recommended Filter type: Organic gases and vapours filter Type A Brown conforming to EN14387.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Yellow-white.
Odour	Solvent.
Odour threshold	No data available.
pH	No data available.
Melting point	No data available.
Initial boiling point and range	No data available.
Flash point	32°C / 90°F Method: Not specified.
Evaporation rate	No data available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	No data available.
Vapour pressure	No data available.
Vapour density	No data available.
Relative density	0.9 @ 23°C ISO 1675
Solubility(ies)	No data available.
Partition coefficient	No data available.
Auto-ignition temperature	No data available.
Decomposition Temperature	No data available.
Viscosity	3000 cP @ 23°C ISO 2555
Explosive properties	No data available.
Oxidising properties	No data available.

9.2. Other information

Other information	Not available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	This material react with certain agents under certain conditions - see Section 10.5.
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10.2. Chemical stability

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Stability Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Reactions with the following materials may generate heat: Oxidising agents.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid exposure to high temperatures or direct sunlight. Take precautionary measures against static discharge.

10.5. Incompatible materials

Materials to avoid Keep away from flammable and combustible materials. Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects There are no data available on this product.

Acute toxicity - oral

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

Acute toxicity - dermal

Summary Harmful in contact with skin.

ATE dermal (mg/kg) 1,774.19

Acute toxicity - inhalation

Summary Harmful if inhaled.

ATE inhalation (vapours mg/l) 17.74

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation.

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Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

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

Inhalation Harmful if inhaled. May cause respiratory irritation.

Ingestion No specific symptoms known.

Skin contact Causes skin irritation. Harmful in contact with skin.

Eye contact Causes serious eye irritation.

Acute and chronic health hazards This product may cause skin and eye irritation. May cause respiratory system irritation. May cause damage to organs through prolonged or repeated exposure.

Toxicological information on ingredients.

Xylene

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,523.0

Species Rat

ATE oral (mg/kg) 3,523.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 12,126.0

Species Rabbit

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 27.124

Species Rat

ATE inhalation (vapours mg/l) 11.0

Skin corrosion/irritation

Animal data Primary dermal irritation index: 3.0 Moderately irritating.

Serious eye damage/irritation

Serious eye damage/irritation Moderately irritating.

Respiratory sensitisation

Respiratory sensitisation No specific test data are available.

Specific target organ toxicity - single exposure

STOT - single exposure Respiratory irritation.

Specific target organ toxicity - repeated exposure

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STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity There are no data for the product.

Acute aquatic toxicity

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

Chronic aquatic toxicity

Summary Aquatic Chronic 3 - H412 Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

Xylene

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 2.6 - 11.23 mg/l, Fish

Acute toxicity - aquatic invertebrates IC₅₀, 24 hours: 1 mg/l, Daphnia magna
EC₅₀, 48 hours: 3.82 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 2.2 mg/l, Selenastrum capricornutum

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 56 days: > 1.3 mg/l, Oncorhynchus mykiss (Rainbow trout)

Chronic toxicity - aquatic invertebrates NOEC, 7 days: 0.96 mg/l, Ceriodaphnia sp.

12.2. Persistence and degradability

Persistence and degradability No data available for the product.

Ecological information on ingredients.

Xylene

Biodegradation The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No data available.

Ecological information on ingredients.

Xylene

Bioaccumulative potential BCF: 25.9, Oncorhynchus mykiss (Rainbow trout)

Partition coefficient log Pow: 3.2

12.4. Mobility in soil

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Mobility No data available.

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

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 class HP3 Flammable HP4 Irritant HP5 STOT / Aspiration toxicity HP6 Acute toxicity HP14 Ecotoxic Recommended EWC Code 08 04 09*

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1139

UN No. (IMDG) 1139

UN No. (ICAO) 1139

UN No. (ADN) 1139

14.2. UN proper shipping name

Proper shipping name (ADR/RID) COATING SOLUTION

Proper shipping name (IMDG) COATING SOLUTION

Proper shipping name (ICAO) COATING SOLUTION

Proper shipping name (ADN) COATING SOLUTION

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels



14.4. Packing group

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ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS	F-E, S-E
ADR transport category	3
Emergency Action Code	•3Y
Hazard Identification Number (ADR/RID)	30
Tunnel restriction code	(D/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	Control of Substances Hazardous to Health Regulations 2002 (as amended). EH40/2005 Workplace exposure limits. Health and Safety at Work etc. Act 1974 (as amended). The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, UK SI 2019/720. The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020, UK SI 2020/1567. The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, UK SI 2019/758, UK SI 2019/858 and UK SI 2019/1144. The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, UK SI 2020/1577.
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).
Authorisations (Annex XIV Regulation 1907/2006)	None of the substances in the product are listed.
Restrictions (Annex XVII Regulation 1907/2006)	No relevant restrictions.
Seveso Directive - Control of major accident hazards	P5c Lower-tier 5000 tonnes Upper-tier 50000 tonnes.

15.2. Chemical safety assessment

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No chemical safety assessment has been carried out for the mixture.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</p> <p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>ATE: Acute Toxicity Estimate.</p> <p>DNEL: Derived No Effect Level.</p> <p>EC₅₀: 50% of maximal Effective Concentration.</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</p> <p>LC₅₀: Lethal Concentration to 50 % of a test population.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p>
Classification abbreviations and acronyms	<p>Acute Tox. = Acute toxicity</p> <p>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</p> <p>Asp. Tox. = Aspiration hazard</p> <p>Eye Irrit. = Eye irritation</p> <p>Skin Irrit. = Skin irritation</p> <p>STOT RE = Specific target organ toxicity-repeated exposure</p> <p>STOT SE = Specific target organ toxicity-single exposure</p>
Key literature references and sources for data	<p>SDS from supplier. Source: European Chemicals Agency, http://echa.europa.eu/</p>
Classification procedures according to Regulation (EC) 1272/2008	<p>Flam. Liq. 3 - H226: On basis of test data. Acute Tox. 4 - H312, Skin Irrit. 2 - H315, Eye Irrit. 2 - H319, Acute Tox. 4 - H332, STOT SE 3 - H335, STOT RE 2 - H373, Aquatic Chronic 4 - H413: Calculation method.</p>
Revision date	22/07/2021
Revision	1
SDS number	20385
SDS status	Approved.
Hazard statements in full	<p>H226 Flammable liquid and vapour.</p> <p>H304 May be fatal if swallowed and enters airways.</p> <p>H312 Harmful in contact with skin.</p> <p>H315 Causes skin irritation.</p> <p>H319 Causes serious eye irritation.</p> <p>H332 Harmful if inhaled.</p> <p>H335 May cause respiratory irritation.</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p> <p>H412 Harmful to aquatic life with long lasting effects.</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.