

ARBOFLEX[®] PU

LIQUID WATERPROOFING

SAFETY DATA SHEET

ARBOFLEX[®] EPDM Primer Component A

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

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

1.1. Product identifier

Product name ARBOFLEX[®] EPDM Primer Component A

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

Identified uses Primer.

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.carlisle@ccm-europe.com

1.4. Emergency telephone number

Emergency telephone NPIS (National Poisons Information Service): 0344 892 0111 (for medical professionals only).
For medical advice, members of the public should contact NHS 111 in England: 111; NHS 24 in Scotland: 111; NHS Direct in Wales: 111 or 0845 4647. In Northern Ireland: contact your local GP or pharmacist.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

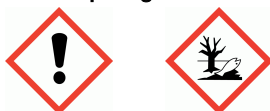
Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1A - H317

Environmental hazards Aquatic Chronic 2 - H411

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.
H411 Toxic to aquatic life with long lasting effects.

ARBOFLEX® EPDM Primer Component A

Precautionary statements	<p>P261 Avoid breathing vapour/ spray.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P391 Collect spillage.</p>
Contains	<p>4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane, Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.</p>

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

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane 70 - 80%			
<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">CAS number: 25068-38-6</td> <td style="width: 33%;">EC number: 500-033-5</td> <td style="width: 33%;">REACH registration number: 01-2119456619-26-XXXX</td> </tr> </table>	CAS number: 25068-38-6	EC number: 500-033-5	REACH registration number: 01-2119456619-26-XXXX
CAS number: 25068-38-6	EC number: 500-033-5	REACH registration number: 01-2119456619-26-XXXX	
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411			
Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane 10 - <20%			
<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">CAS number: 9003-36-5</td> <td style="width: 33%;">REACH registration number: 01-2119454392-40-XXXX</td> </tr> </table>	CAS number: 9003-36-5	REACH registration number: 01-2119454392-40-XXXX	
CAS number: 9003-36-5	REACH registration number: 01-2119454392-40-XXXX		
Classification Skin Irrit. 2 - H315 Skin Sens. 1A - H317 Aquatic Chronic 2 - H411			
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. 5 - 10%			
<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">CAS number: 68609-97-2</td> <td style="width: 33%;">EC number: 271-846-8</td> <td style="width: 33%;">REACH registration number: 01-2119485289-22-XXXX</td> </tr> </table>	CAS number: 68609-97-2	EC number: 271-846-8	REACH registration number: 01-2119485289-22-XXXX
CAS number: 68609-97-2	EC number: 271-846-8	REACH registration number: 01-2119485289-22-XXXX	
Classification Skin Irrit. 2 - H315 Skin Sens. 1 - H317			

ARBOFLEX® EPDM Primer Component A

Solvent naphtha (petroleum), light arom.	< 0.3%
CAS number: 64742-95-6	EC number: 265-199-0
Classification	
Flam. Liq. 3 - H226	
Skin Irrit. 2 - H315	
STOT SE 3 - H335	
Asp. Tox. 1 - H304	
Aquatic Chronic 2 - H411	

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

Ingredient notes Solvent naphtha (petroleum), light arom. Substance classified in accordance with Note P, Annex VI of EC Regulation (EC) 1272/2008. The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EC No. 200-753-7).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.
Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist.
Ingestion	Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting.
Skin contact	It is important to remove the substance from the skin immediately. In the event of any sensitisation symptoms developing, ensure further exposure is avoided. Remove contamination with soap and water or recognised skin cleansing agent. Get medical attention if symptoms are severe or persist after washing.
Eye contact	Rinse with water. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Get medical attention if any discomfort continues.
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	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known.
Ingestion	May cause sensitisation or allergic reactions in sensitive individuals. May cause irritation.
Skin contact	May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Causes skin irritation.
Eye contact	Causes serious eye irritation.

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

Notes for the doctor Treat symptomatically. May cause sensitisation or allergic reactions in sensitive individuals.

SECTION 5: Firefighting measures

5.1. Extinguishing media

ARBOFLEX® EPDM Primer Component A

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

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

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents.

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. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid contact with skin and eyes. Contaminated work clothing should not be allowed out of the workplace.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

ARBOFLEX® EPDM Primer Component A

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

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

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-([2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl]oxirane (CAS: 9003-36-5)

DNEL Workers - Inhalation; Long term systemic effects: 29.39 mg/m³
Workers - Dermal; Long term systemic effects: 104.15 mg/kg/day
Workers - Dermal; Short term local effects: 8.3 µg/cm²

PNEC Fresh water; 0.003 mg/l
Intermittent release; 0.025 mg/l
marine water; 0.0003 mg/l
STP; 10 mg/l
Sediment (Freshwater); 0.294 mg/kg
Sediment (Marinewater); 0.029 mg/kg
Soil; 0.237 mg/kg

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (CAS: 68609-97-2)

DNEL Workers - Inhalation; Long term systemic effects: 3.6 mg/m³
Workers - Dermal; Long term systemic effects: 1 mg/kg/day

PNEC Fresh water; 0.106 mg/l
marine water; 0.011 mg/l
STP; 10 mg/l
Sediment (Freshwater); 307.16 mg/kg
Sediment (Marinewater); 30.72 mg/kg
Soil; 1.234 mg/l

Solvent naphtha (petroleum), light arom. (CAS: 64742-95-6)

DNEL Workers - Inhalation; Long term systemic effects: 1286.4 mg/m³
Workers - Inhalation; Long term local effects: 837.5 mg/m³

8.2. Exposure controls

ARBOFLEX® EPDM Primer Component A

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

Wear tight-fitting, chemical splash goggles or face shield.

Hand protection

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. To protect hands from chemicals, gloves should comply with European Standard EN374. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended. 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.

Other skin and body protection

May cause skin sensitisation or allergic reactions in sensitive individuals. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Hygiene measures

Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

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 'CE'-marked. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with European Standard EN14387. Full face mask respirators with replaceable filter cartridges should comply with European Standard EN136. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	White.
Odour	Characteristic.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	> 100°C
Evaporation rate	No information available.
Evaporation factor	No information available.

ARBOFLEX® EPDM Primer Component A

Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	1.8
Solubility(ies)	No information available.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	1100 cP
Explosive properties	Not considered explosive.
Oxidising properties	There are no chemical groups present in the product that are associated with oxidising properties.

9.2. Other information

Other information Not known.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity See the other subsections of this section for further details.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects There are no data available on this product.

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

ARBOFLEX® EPDM Primer Component A

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Skin Irrit. 2 Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Eye Irrit. 2 Causes serious eye irritation.

Respiratory sensitisation

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

Skin sensitisation

Skin sensitisation Skin Sens. 1A May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Reproductive toxicity - development Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

General information

The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation

No specific symptoms known.

Ingestion

May cause sensitisation or allergic reactions in sensitive individuals. May cause irritation.

Skin contact

May cause skin sensitisation or allergic reactions in sensitive individuals. Redness. Causes skin irritation.

Eye contact

Causes serious eye irritation.

Route of exposure

Ingestion Inhalation Skin and/or eye contact

Target organs

No specific target organs known.

Medical considerations

Skin disorders and allergies.

Toxicological information on ingredients.

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

ARBOFLEX® EPDM Primer Component A

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal, Rat

Skin corrosion/irritation

Animal data OECD 404 Acute dermal irritation / corrosion: Mildly irritating (rabbit)

Serious eye damage/irritation

Serious eye damage/irritation OECD 405 Acute eye irritation / corrosion: Mildly irritating (rabbit)

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - : Sensitising.

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane

Acute toxicity - oral

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

Species Rat

ATE oral (mg/kg) 5,000.0

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Animal data Skin irritant (rabbit, OECD Guideline 404 (Acute Dermal Irritation / Corrosion))

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction. Local Lymph Node Assay (LLNA) - Mouse: Sensitising.

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 26,800.0

Species Rat

ATE oral (mg/kg) 26,800.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 4,000.0

Species Rabbit

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Animal data Moderately irritating. Rabbit

Serious eye damage/irritation

ARBOFLEX® EPDM Primer Component A

Serious eye damage/irritation	Slightly irritating. Rabbit
<u>Skin sensitisation</u>	
Summary	May cause an allergic skin reaction.
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.
<u>Solvent naphtha (petroleum), light arom.</u>	
<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD₅₀ mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0
<u>Acute toxicity - inhalation</u>	
Acute toxicity inhalation (LC₅₀ dust/mist mg/l)	5.61
Species	Rat
ATE inhalation (dusts/mists mg/l)	5.61
<u>Skin corrosion/irritation</u>	
Summary	Causes skin irritation.
Animal data	Skin irritant (rabbit, OECD Guideline 404 (Acute Dermal Irritation / Corrosion))
<u>Serious eye damage/irritation</u>	
Summary	Conclusive data but not sufficient for classification.
Serious eye damage/irritation	OECD 405 Acute Eye Irritation / Corrosion: Non-irritant (rabbit).
<u>Skin sensitisation</u>	
Summary	Conclusive data but not sufficient for classification.
Skin sensitisation	Not sensitising (OECD 406, Guinea Pig Buehler test)
<u>Germ cell mutagenicity</u>	
Summary	Conclusive data but not sufficient for classification.
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. Gene mutation: Negative.
Genotoxicity - in vivo	Mammalian erythrocyte micronucleus test: Negative.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	May cause drowsiness or dizziness.
<u>Aspiration hazard</u>	
Summary	May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

Ecotoxicity There are no data on the ecotoxicity of this product.

ARBOFLEX® EPDM Primer Component A

12.1. Toxicity

Toxicity Aquatic Chronic 2 Toxic to aquatic life with long lasting effects.

Ecological information on ingredients.

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 1.5 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 1.7 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: 9.4 mg/l, Algae
Acute toxicity - microorganisms	IC ₈₀ , 3 hours: >100 mg/l, Bacteria

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: 2.54 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 2.55 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hours: >1000 mg/l, Algae

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hours: >100 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EL50, 48 hours: 7.2 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 843.75 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOELR, 21 days: 56 mg/l, Daphnia magna
---	--

Solvent naphtha (petroleum), light arom.

Acute aquatic toxicity

Acute toxicity - fish	LL ₅₀ , 96 hours: 10 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EL50, 48 hours: 4.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EL50, 72 hours: 3.1 mg/l, Pseudokirchneriella subcapitata

Chronic aquatic toxicity

ARBOFLEX® EPDM Primer Component A

Chronic toxicity - aquatic invertebrates NOELR, 21 days: 2.6 mg/l, Daphnia magna

12.2. Persistence and degradability

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

Ecological information on ingredients.

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

Persistence and degradability The product is not readily biodegradable.

Biodegradation - Degradation 5%: 28 days

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Persistence and degradability Not readily biodegradable.

Biodegradation - Degradation 16: 28 days

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Persistence and degradability The substance is readily biodegradable.

Biodegradation - Degradation 87%: 28 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

Bioaccumulative potential BCF: 31,

Partition coefficient log Pow: 3.242

Reaction mass of 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]bis(oxirane) and 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]bis(oxirane) and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy}methyl)oxirane

Bioaccumulative potential BCF: 150 L/kg ww, QSAR

12.4. Mobility in soil

Mobility No data available.

Ecological information on ingredients.

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

Adsorption/desorption coefficient - Log Koc: > 5.63 @ 20°C

12.5. Results of PBT and vPvB assessment

ARBOFLEX® EPDM Primer Component A

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 The generation of waste should be minimised or avoided wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods Do not empty into drains. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Dispose of waste via a licensed waste disposal contractor.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082
UN No. (ADN)	3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane)
Proper shipping name (IMDG)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane)
Proper shipping name (ICAO)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane)
Proper shipping name (ADN)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane)

14.3. Transport hazard class(es)

ADR/RID class	9
ADR/RID classification code	M6
ADR/RID label	9
IMDG class	9
ICAO class/division	9
ADN class	9

Transport labels



ARBOFLEX® EPDM Primer Component A

14.4. Packing group

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



14.6. Special precautions for user

EmS	F-A, S-F
ADR transport category	3
Emergency Action Code	•3Z
Hazard Identification Number (ADR/RID)	90
Tunnel restriction code	(-)

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. When carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less, this product is not subject to provisions of ADR, IMDG and IATA.
--	---

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). Health and Safety at Work etc. Act 1974 (as amended). The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"]. 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 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). Commission Regulation (EU) No 2015/830 of 28 May 2015. 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).
Guidance	Workplace Exposure Limits EH40.
Restrictions (Annex XVII Regulation 1907/2006)	No relevant restrictions.

ARBOFLEX® EPDM Primer Component A

Seveso Directive - Control of major accident hazards E2 Lower-tier 200 tonnes Upper-tier 500 tonnes.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.</p> <p>RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.</p> <p>IATA: International Air Transport Association.</p> <p>ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>CAS: Chemical Abstracts Service.</p> <p>ATE: Acute Toxicity Estimate.</p> <p>LC₅₀: Lethal Concentration to 50 % of a test population.</p> <p>LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).</p> <p>EC₅₀: 50% of maximal Effective Concentration.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p>
Classification abbreviations and acronyms	<p>Eye Irrit. = Eye irritation</p> <p>Skin Irrit. = Skin irritation</p> <p>Skin Sens. = Skin sensitisation</p> <p>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</p>
Key literature references and sources for data	Raw material suppliers SDS. Source: European Chemicals Agency, http://echa.europa.eu/
Classification procedures according to Regulation (EC) 1272/2008	<p>Skin Irrit. 2 - H315: Eye Irrit. 2 - H319: Skin Sens. 1A - H317: : Calculation method. Aquatic Chronic 2 - H411: : Calculation method.</p>
Training advice	Only trained personnel should use this material.
Revision comments	This is the first issue.
Revision date	13/05/2022
Revision	1
SDS number	20566
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>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H319 Causes serious eye irritation.</p> <p>H335 May cause respiratory irritation.</p> <p>H411 Toxic 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.