

20.10.2025

**Kit components**

Product code	Description
--------------	-------------

<b>7,196</b>	<b>PermaCOAT Epoxy Crack Filler</b>
--------------	-------------------------------------

Components:

4,520	PermaCOAT Epoxy Crack Filler Base
-------	-----------------------------------

4,521	PermaCOAT Epoxy Crack Filler Hardener
-------	---------------------------------------

## Safety Data Sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

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

##### · 1.1 Product identifier

· Trade name: **PermaCOAT Epoxy Crack Filler Base**

· Registration number Mixture

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

· Product category PC1 Adhesives, sealants

· Application of the substance / the mixture Coating

· Uses advised against

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Any use involving significant release of aerosol, vapour or dust in the breathing zone of workers where they are exposed without suitable respiratory protective equipment (RPE).

Processes involving extreme heat use advised against.

The product is strictly intended for industrial or professional use only.

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

· Supplier:

Permagard Products Ltd  
Chitting Industrial Estate  
Avonmouth  
Bristol BS11 0YB  
England

Tel: 0117 82 3282

Email: sales@permagard.co.uk

· Further information obtainable from: Product safety department.

##### · 1.4 Emergency telephone number:

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

#### SECTION 2: Hazards identification

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

· Classification according to GB-CLP

Skin Irrit. 2            H315 Causes skin irritation.

Eye Irrit. 2            H319 Causes serious eye irritation.

Skin Sens. 1            H317 May cause an allergic skin reaction.

Repr. 1A                H360F May damage fertility.

Aquatic Chronic 2    H411 Toxic to aquatic life with long lasting effects.

##### · 2.2 Label elements

· Labelling according to GB-CLP The product is classified and labelled according to the GB CLP regulation.

· Hazard pictograms



GHS07



GHS08



GHS09

· Signal word Danger

· Hazard-determining components of labelling:

bis[4-(2,3-epoxypropoxy)phenyl]propane

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

Bisphenol F-epoxy resin

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H360F May damage fertility.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves / eye protection / face protection.

(Contd. on page 2)

## Safety Data Sheet according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

**Trade name: PermaCOAT Epoxy Crack Filler Base**

(Contd. of page 1)

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local regulations.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

· <b>Dangerous components:</b>		
CAS: 1675-54-3 EINECS: 216-823-5 Index number: 603-073-00-2 Reg.nr.: 01-2119456619-26-XXXX	bis[4-(2,3-epoxypropoxy)phenyl]propane ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 %	10 – < 25%
EC number: 701-263-0 Reg.nr.: 01-2119454392-40-XXXX	Bisphenol F-epoxy resin ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Skin Sens. 1A, H317	10 – < 25%
CAS: 68609-97-2 EINECS: 271-846-8 Index number: 603-103-00-4 Reg.nr.: 01-2119485289-22-XXXX	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs ⚠ Repr. 1A, H360F; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	2.5 – < 10%
CAS: 872-50-4 EINECS: 212-828-1 Index number: 606-021-00-7 Reg.nr.: 01-2119485289-22-XXXX	1-methyl-2-pyrrolidone ⚠ Repr. 1B, H360D; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 Specific concentration limits: Repr. 1B; H360: C ≥ 5 % STOT SE 3; H335: C ≥ 10 %	0.1 – 1%
· <b>SVHC</b>		
CAS: 872-50-4	1-methyl-2-pyrrolidone	

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**  
Remove the subject from the contaminated area as soon as possible.  
Seek immediate medical advice.
- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact:**  
Check for and remove any contact lenses.  
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Wash mouth out with water  
Do not induce vomiting; call for medical help immediately.  
If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
- **Information for doctor:** Treat symptomatically and supportively.
- **4.2 Most important symptoms and effects, both acute and delayed** Allergic reactions
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
Combustible  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide  
Nitrogen oxides (NOx)

(Contd. on page 3)

**Safety Data Sheet**  
according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

**Trade name: PermaCOAT Epoxy Crack Filler Base**

(Contd. of page 2)

- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Do not inhale explosion gases or combustion gases.  
Wear fully protective suit.
- **Additional information**  
Cool endangered receptacles with water spray.  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Particular danger of slipping on leaked/spilled product.  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation
- **6.2 Environmental precautions:**  
Do not allow to penetrate the ground/soil.  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Contain and collect spillage with non-combustible, absorbent material e.g.sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.  
Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **Storage class:** 6.1 C
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**CAS: 872-50-4 1-methyl-2-pyrrolidone**

WEL	Short-term value: 80 mg/m <sup>3</sup> , 20 ppm
	Long-term value: 40 mg/m <sup>3</sup> , 10 ppm
Sk	

· **DNELs**

**CAS: 1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane**

Oral	Long-term systemic effects	500 µg/kg bw/day (general population)
Dermal	Long-term systemic effects	89.3 µg/kg bw/day (general population) 750 µg/kg bw/day (worker)
Inhalative	Long-term systemic effects	4.93 mg/m <sup>3</sup> (worker)
	Long-term systemic effects	870 µg/m <sup>3</sup> (general population)

**Bisphenol F-epoxy resin**

Oral	Long-term systemic effects	6.25 mg/kg bw/day (general population)
Dermal	Long-term systemic effects	62.5 mg/kg bw/day (general population) 104.15 mg/kg bw/day (worker)
Inhalative	Long-term systemic effects	8.7 mg/m <sup>3</sup> (general population)

(Contd. on page 4)

## Safety Data Sheet

according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

**Trade name: PermaCOAT Epoxy Crack Filler Base**

(Contd. of page 3)

		29.39 mg/m <sup>3</sup> (worker)
<b>CAS: 68609-97-2 Oxirane, mono[(C12-14-alkyloxy)methyl] derivs</b>		
Oral	Long-term systemic effects	500 µg/kg bw/day (general population)
Dermal	Long-term systemic effects	1 mg/kg bw/day (worker)
	Long-term systemic effects	500 µg/kg bw/day (general population)
Inhalative	Long-term systemic effects	3.6 mg/m <sup>3</sup> (worker)
	Long-term systemic effects	870 µg/m <sup>3</sup> (general population)
<b>CAS: 872-50-4 1-methyl-2-pyrrolidone</b>		
Oral	Long-term systemic effects	850 µg/kg bw/day (general population)
Dermal	Long-term systemic effects	2.4 mg/kg bw/day (general population)
		4.8 mg/kg bw/day (worker)
Inhalative	Long-term systemic effects	3.69 mg/m <sup>3</sup> (general population)
		14.4 mg/m <sup>3</sup> (worker)
	Long-term local effects	4.5 mg/m <sup>3</sup> (general population)
		40 mg/m <sup>3</sup> (worker)
<b>- PNECs</b>		
<b>CAS: 1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane</b>		
Freshwater		6 µg/L
Freshwater - Intermittent releases		18 µg/L
Marine water		600 ng/L
Marine Water - Intermittent releases		1.8 µg/L
Sewage Treatment Plant		10 mg/L
Sediment (freshwater)		341 µg/kg
Sediment (marine water)		34.14 µg/kg
Soil		64.7 µg/kg
Secondary poisoning		11 mg/kg food
<b>Bisphenol F-epoxy resin</b>		
Freshwater		3 µg/L
Freshwater - Intermittent releases		25.4 µg/L
Marine water		300 ng/L
Sewage Treatment Plant		10 mg/L
Sediment (freshwater)		294 µg/kg
Sediment (marine water)		29.4 µg/kg
Soil		237 µg/kg
<b>CAS: 68609-97-2 Oxirane, mono[(C12-14-alkyloxy)methyl] derivs</b>		
Freshwater		105.8 µg/L
Freshwater - Intermittent releases		72 µg/L
Marine water		10.58 µg/L
Sewage Treatment Plant		10 mg/L
Sediment (freshwater)		307.16 mg/kg
Sediment (marine water)		30.72 mg/kg
Soil		1.234 mg/kg
<b>CAS: 872-50-4 1-methyl-2-pyrrolidone</b>		
Freshwater		250 µg/L
Freshwater - Intermittent releases		5 mg/L
Marine water		258 µg/L
Sewage Treatment Plant		10 mg/L
Sediment (freshwater)		1.09 mg/kg
Sediment (marine water)		109 µg/kg
Soil		70.1 µg/kg

**- Additional information:** The lists valid during the making were used as basis.

### - 8.2 Exposure controls

- **Appropriate engineering controls** No further data; see section 7.

- **Individual protection measures, such as personal protective equipment**

- **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

(Contd. on page 5)

## Safety Data Sheet according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

**Trade name: PermaCOAT Epoxy Crack Filler Base**

(Contd. of page 4)

- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.
- Avoid contact with the eyes and skin.
- Ensure that eyewash stations and safety showers are close to the workstation location.
- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Hand protection**



Protective gloves.  
Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection**



Safety glasses with side-shields conforming to EN166.  
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

- **Body protection:**



Protective work clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

- **Environmental exposure controls** Do not allow to enter drains, sewers or watercourses.
- **Risk management measures** The operators shall be instructed adequately.

### SECTION 9: Physical and chemical properties

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

##### · General Information

· <b>Physical state</b>	Liquid
· <b>Colour:</b>	Grey
· <b>Odour:</b>	Characteristic
· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Boiling point or initial boiling point and boiling range</b>	Undetermined.
· <b>Flammability</b>	Not applicable.
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Flash point:</b>	> 93 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>Dynamic:</b>	Not determined.
· <b>Solubility</b>	
· <b>water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	1.65 – 1.75 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.

#### · 9.2 Other information

· <b>Appearance:</b>	
· <b>Form:</b>	Liquid

(Contd. on page 6)

## Safety Data Sheet according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

Trade name: PermaCOAT Epoxy Crack Filler Base

(Contd. of page 5)

<ul style="list-style-type: none"> <li>· <b>Important information on protection of health and environment, and on safety.</b></li> <li>· <b>Ignition temperature:</b> Product is not self-igniting.</li> <li>· <b>Explosive properties:</b> Product does not present an explosion hazard.</li> <li>· <b>Change in condition</b></li> <li>· <b>Evaporation rate</b> Not determined.</li> </ul>	
<ul style="list-style-type: none"> <li>· <b>Information with regard to physical hazard classes</b></li> </ul>	Not applicable

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Heat and static discharge.
- **10.5 Incompatible materials:**  
Strong acids.  
Strong bases.  
Strong oxidising agents.
- **10.6 Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Nitrogen oxides (NO<sub>x</sub>)

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

<ul style="list-style-type: none"> <li>· <b>LD/LC50 values relevant for classification:</b></li> </ul>	
<b>CAS: 1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane</b>	
Oral	LD50 > 15,000 mg/kg (rat)
Dermal	LD50 > 23,000 mg/kg (rabbit)
<b>CAS: 872-50-4 1-methyl-2-pyrrolidone</b>	
Oral	LD50 > 4,150 mg/kg (rat)
Dermal	LD50 > 5,000 mg/kg (rabbit)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes skin irritation.
- **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** May damage fertility.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Additional toxicological information:** May cause sensitisation in susceptible persons.
- **11.2 Information on other hazards**

<ul style="list-style-type: none"> <li>· <b>Endocrine disrupting properties</b></li> </ul>	None of the ingredients are listed.
--	-------------------------------------

### SECTION 12: Ecological information

- **12.1 Toxicity**

<ul style="list-style-type: none"> <li>· <b>Aquatic toxicity:</b></li> </ul>	
<b>CAS: 1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane</b>	
EC50 (72 h)	11 mg/l (algae)
<b>Bisphenol F-epoxy resin</b>	
EC50 (72 h)	1.8 mg/l (algae)
<b>CAS: 872-50-4 1-methyl-2-pyrrolidone</b>	
EC50 (96 h)	> 1,000 mg/l (Bacteria)
EC50 (72 h)	600.5 mg/l (Algae)

- **12.2 Persistence and degradability** Not easily biodegradable

(Contd. on page 7)

## Safety Data Sheet according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

**Trade name: PermaCOAT Epoxy Crack Filler Base**

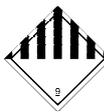
(Contd. of page 6)

- **12.3 Bioaccumulative potential** Contains components with the potential to bioaccumulate.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
 Toxic for aquatic organisms  
 Also poisonous for fish and plankton in water bodies.  
 Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
 Do not allow product to reach ground water, water course or sewage system.  
 Danger to drinking water if even small quantities leak into the ground.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
 Recommended Hierarchy of Controls:
  - Minimise waste;
  - Reuse if not contaminated;
  - Recycle, if possible; or
  - Safe disposal (if all else fails).
 Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
 Contact waste processors for recycling information.  
 Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.
- **Uncleaned packaging:**
- **Recommendation:**  
 Do not reuse empty containers - dispose of in accordance with the regulations issued by the appropriate local authorities.  
 Disposal must be made according to official regulations.  
 Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating.  
 Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

### SECTION 14: Transport information

<ul style="list-style-type: none"> <li>· <b>14.1 UN number or ID number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>	<p style="text-align: center;">UN3082</p>
<ul style="list-style-type: none"> <li>· <b>14.2 UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG</b></li> <li>· <b>IATA</b></li> </ul>	<p>UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F-epoxy resin, bis[4-(2,3-epoxypropoxy)phenyl]propane)</p> <p>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F-epoxy resin, bis[4-(2,3-epoxypropoxy)phenyl]propane), MARINE POLLUTANT</p> <p>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol F-epoxy resin, bis[4-(2,3-epoxypropoxy)phenyl]propane)</p>
<ul style="list-style-type: none"> <li>· <b>14.3 Transport hazard class(es)</b></li> <li>· <b>ADR</b></li> </ul> <div style="display: flex; align-items: center; gap: 10px;">   </div> <ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	<p>9 (M6) Miscellaneous dangerous substances and articles. 9</p>

(Contd. on page 8)

**Safety Data Sheet**  
according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

Trade name: PermaCOAT Epoxy Crack Filler Base

(Contd. of page 7)

· <b>IMDG, IATA</b> 	
· <b>Class</b> · <b>Label</b>	9 Miscellaneous dangerous substances and articles. 9
· <b>14.4 Packing group</b> · <b>ADR, IMDG, IATA</b>	III
· <b>14.5 Environmental hazards:</b> · <b>Marine pollutant:</b> · <b>Special marking (ADR):</b> · <b>Special marking (IATA):</b>	Product contains environmentally hazardous substances: bis[4-(2,3-epoxypropoxy)phenyl]propane Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· <b>14.6 Special precautions for user</b> · <b>Hazard identification number (Kemler code):</b> · <b>Emergency Action Code:</b> · <b>EMS Number:</b> · <b>Stowage Category</b>	Warning: Miscellaneous dangerous substances and articles. 90 +3Z F-A,S-F A
· <b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
· <b>Transport/Additional information:</b>	Amounts up to 5kg or 5L per single or inner package are not regulated according to ADR/RID SP 375, IMDG 2.10.2.7 and IATA SP A197.
· <b>ADR</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b> · <b>Transport category</b> · <b>Tunnel restriction code</b>	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml 3 (-)
· <b>IMDG</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b>	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL F-EPOXY RESIN, BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE), 9, III

**SECTION 15: Regulatory information**

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
 · **Poisons Act**

· <b>Regulated explosives precursors</b> None of the ingredients are listed.
· <b>Regulated poisons</b> None of the ingredients are listed.
· <b>Reportable explosives precursors</b> None of the ingredients are listed.
· <b>Reportable poisons</b> None of the ingredients are listed.

· **Control Of Major Accident Hazards Regulations 2015 (COMAH)**  
 · **Named dangerous substances - ANNEX I** None of the ingredients are listed.  
 · **COMAH category** E2  
 · **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t  
 · **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

(Contd. on page 9)

## Safety Data Sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

Trade name: PermaCOAT Epoxy Crack Filler Base

(Contd. of page 8)

- **National regulations:**

- **Substances of very high concern (SVHC) according to UK REACH**

CAS: 872-50-4	1-methyl-2-pyrrolidone
---------------	------------------------

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

#### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

- **Relevant phrases**

H315 Causes skin irritation.  
 H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H335 May cause respiratory irritation.  
 H360 May damage fertility or the unborn child.  
 H360D May damage the unborn child.  
 H360F May damage fertility.  
 H411 Toxic to aquatic life with long lasting effects.

- **Training hints**

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

- **Department issuing SDS:** Product safety department.

- **Abbreviations and acronyms:**

UK- REACH: The UK REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

GB- CLP: Retained GB CLP Regulation (EU) No. 1272/2008 as amended for Great Britain on the Classification, Labelling and Packaging of Chemicals.

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (UK REACH)

PNEC: Predicted No-Effect Concentration (UK REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Repr. 1A: Reproductive toxicity – Category 1A

Repr. 1B: Reproductive toxicity – Category 1B

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

## Safety Data Sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

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

##### · 1.1 Product identifier

· Trade name: **PermaCOAT Epoxy Crack Filler Hardener**

· Registration number Mixture

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

· Product category PC1 Adhesives, sealants

· Application of the substance / the mixture Hardening agent/ Curing agent

· Uses advised against

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Any use involving significant release of aerosol, vapour or dust in the breathing zone of workers where they are exposed without suitable respiratory protective equipment (RPE).

Processes involving extreme heat use advised against.

The product is strictly intended for industrial or professional use only.

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

· Supplier:

Permagard Products Ltd  
Chitting Industrial Estate  
Avonmouth  
Bristol BS11 0YB  
England

Tel: 0117 82 3282

Email: sales@permagard.co.uk

· Further information obtainable from: Product safety department.

##### · 1.4 Emergency telephone number:

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

#### SECTION 2: Hazards identification

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

· Classification according to GB-CLP

Acute Tox. 4      H302 Harmful if swallowed.

Skin Corr. 1B      H314 Causes severe skin burns and eye damage.

Eye Dam. 1      H318 Causes serious eye damage.

Skin Sens. 1      H317 May cause an allergic skin reaction.

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

##### · 2.2 Label elements

· Labelling according to GB-CLP The product is classified and labelled according to the GB CLP regulation.

· Hazard pictograms



GHS05

GHS07

· Signal word Danger

##### · Hazard-determining components of labelling:

4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Benzyl alcohol

3-aminomethyl-3,5,5-trimethylcyclohexylamine

m-phenylenebis(methylamine)

##### · Hazard statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

##### · Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

(Contd. on page 2)

## Safety Data Sheet according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

**Trade name: PermaCOAT Epoxy Crack Filler Hardener**

(Contd. of page 1)

- 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.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local regulations.

**2.3 Other hazards**

**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

**3.2 Mixtures**

• **Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5 Reg.nr.: 01-2119492630-38-XXXX	Benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Sens. 1B, H317 ATE: LD50 oral: 1,200 mg/kg LC50/4 h inhalative: 11 mg/l	25 – 50%
CAS: 38294-64-3 NLP: 500-101-4 Reg.nr.: 01-2119965165-33-XXXX	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Skin Sens. 1, H317; Aquatic Chronic 3, H412	25 – 50%
CAS: 2855-13-2 EINECS: 220-666-8 Index number: 612-067-00-9 Reg.nr.: 01-2119514687-32-XXXX	3-aminomethyl-3,5,5-trimethylcyclohexylamine ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; Skin Sens. 1A, H317 ATE: LD50 oral: 1,030 mg/kg Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 %	25 – 50%
CAS: 1477-55-0 EINECS: 216-032-5 Reg.nr.: 01-2119480150-50-XXXX	m-phenylenebis(methylamine) ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332	5 – 10%
CAS: 103-83-3 EINECS: 203-149-1 Index number: 612-074-00-7 Reg.nr.: 01-2119529232-48-XXXX	Benzyl dimethylamine ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Aquatic Chronic 3, H412	2.5 – < 5%
CAS: 69-72-7 EINECS: 200-712-3 Index number: 607-732-00-5 Reg.nr.: 01-2119486984-17-XXXX	Salicylic acid ⚠ Repr. 2, H361d; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	1 – 2.5%

• **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

**4.1 Description of first aid measures**

**General information:**

Immediately remove any clothing soiled by the product.  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**After inhalation:**

- In case of inhalation:
  - Provide fresh air.
  - In case of breathing difficulties administer oxygen.
  - No mouth-to-mouth or mouth-to-nose resuscitation. Use respiratory bag or oxygen resuscitation apparatus.
  - Do not leave patient unattended.

Seek medical treatment.

**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.  
Chemical burns must be treated promptly by a physician.

**After eye contact:**

Check for and remove any contact lenses.  
Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:**

Wash mouth out with water  
Do not induce vomiting; call for medical help immediately.  
If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

**Information for doctor:**

Inhalation of an aerosol of this substance may cause lung oedema.

(Contd. on page 3)

## Safety Data Sheet according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

Trade name: PermaCOAT Epoxy Crack Filler Hardener

(Contd. of page 2)

- Treat symptomatically and supportively.
- **4.2 Most important symptoms and effects, both acute and delayed** Allergic reactions
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
Combustible  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide  
Chlorine compounds  
Nitrogen oxides (NO<sub>x</sub>)
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Do not inhale explosion gases or combustion gases.  
Wear fully protective suit.
- **Additional information**  
Cool endangered receptacles with water spray.  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Particular danger of slipping on leaked/spilled product.  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Do not allow to penetrate the ground/soil.  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.  
Safety showers and eye wash facilities should be available at the work area.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Prevent any seepage into the ground.  
Store only in the original receptacle.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed receptacles.  
Protect from heat and direct sunlight.
- **Storage class:** 8 A
- **7.3 Specific end use(s)** No further relevant information available.

(Contd. on page 4)

## Safety Data Sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

Trade name: PermaCOAT Epoxy Crack Filler Hardener

(Contd. of page 3)

#### SECTION 8: Exposure controls/personal protection

##### · 8.1 Control parameters

##### · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

##### · DNELs

CAS: 100-51-6 Benzyl alcohol		
Oral	Long-term systemic effects	4 mg/kg bw/day (general population)
	Short-term systemic effects	20 mg/kg bw/day (general population)
Dermal	Long-term systemic effects	4 mg/kg bw/day (general population)
		8 mg/kg bw/day (worker)
Inhalative	Short-term systemic effects	20 mg/kg bw/day (general population)
		40 mg/kg bw/day (worker)
Inhalative	Long-term systemic effects	5.4 mg/m <sup>3</sup> (general population)
		22 mg/m <sup>3</sup> (worker)
	Short-term systemic effects	27 mg/m <sup>3</sup> (general population)
		110 mg/m <sup>3</sup> (worker)
CAS: 38294-64-3 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine		
Oral	Long-term systemic effects	50 µg/kg bw/day (general population)
Dermal	Long-term systemic effects	50 µg/kg bw/day (general population)
		140 µg/kg bw/day (worker)
Inhalative	Long-term systemic effects	74 µg/m <sup>3</sup> (general population)
		493 µg/m <sup>3</sup> (worker)
CAS: 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine		
Oral	Long-term systemic effects	300 µg/kg bw/day (general population)
	Short-term systemic effects	300 µg/kg bw/day (general population)
Inhalative	Long-term local effects	73 µg/m <sup>3</sup> (worker)
	Short-term local effects	73 µg/m <sup>3</sup> (worker)
CAS: 1477-55-0 m-phenylenebis(methylamine)		
Dermal	Long-term systemic effects	330 µg/kg bw/day (worker)
Inhalative	Long-term systemic effects	1.2 mg/m <sup>3</sup> (worker)
	Long-term local effects	200 µg/m <sup>3</sup> (worker)
CAS: 103-83-3 Benzyl dimethylamine		
Oral	Long-term systemic effects	400 µg/kg bw/day (general population)
	Short-term systemic effects	800 µg/kg bw/day (general population)
Dermal	Long-term systemic effects	2.1 mg/kg bw/day (worker)
	Short-term systemic effects	1.5 mg/kg bw/day (general population)
Inhalative		4.2 mg/kg bw/day (worker)
	Long-term systemic effects	800 µg/kg bw/day (general population)
Inhalative	Long-term systemic effects	1.3 mg/m <sup>3</sup> (general population)
		7.4 mg/m <sup>3</sup> (worker)
	Short-term systemic effects	2.6 mg/m <sup>3</sup> (general population)
		14.8 mg/m <sup>3</sup> (worker)
CAS: 69-72-7 Salicylic acid		
Oral	Long-term systemic effects	1 mg/kg bw/day (general population)
	Short-term systemic effects	4 mg/kg bw/day (general population)
Dermal	Long-term systemic effects	1 mg/kg bw/day (general population)
		2.3 mg/kg bw/day (worker)
Inhalative	Long-term systemic effects	4 mg/m <sup>3</sup> (general population)
		5 mg/m <sup>3</sup> (worker)
	Long-term local effects	5 mg/m <sup>3</sup> (worker)
· PNECs		
CAS: 100-51-6 Benzyl alcohol		
Freshwater		1 – 1.02 mg/L
Freshwater - Intermittent releases		2.3 mg/L
Marine water		100 – 102 µg/L

(Contd. on page 5)

## Safety Data Sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

**Trade name: PermaCOAT Epoxy Crack Filler Hardener**

(Contd. of page 4)

Sewage Treatment Plant	39 mg/L
Sediment (freshwater)	5.27 mg/kg
Sediment (marine water)	527 µg/kg
Soil	456 µg/kg
<b>CAS: 38294-64-3 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine</b>	
Freshwater	11.1 µg/L
Freshwater - Intermittent releases	111 µg/L
Marine water	1.11 µg/L
Sewage Treatment Plant	10 mg/L
Sediment (freshwater)	4,320 mg/kg
Sediment (marine water)	432 mg/kg
Soil	864 mg/kg
Secondary poisoning	1 mg/kg food
<b>CAS: 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine</b>	
Freshwater	60 µg/L
Freshwater - Intermittent releases	230 µg/L
Marine water	6 µg/L
Sewage Treatment Plant	3.18 mg/L
Sediment (freshwater)	5.784 mg/kg
Sediment (marine water)	578 µg/kg
Soil	1.121 mg/kg
<b>CAS: 1477-55-0 m-phenylenebis(methylamine)</b>	
Freshwater	94 µg/L
Freshwater - Intermittent releases	152 µg/L
Marine water	9.4 µg/L
Sewage Treatment Plant	10 mg/L
Sediment (freshwater)	12.4 mg/kg
Sediment (marine water)	1.24 mg/kg
Soil	2.44 mg/kg
<b>CAS: 103-83-3 Benzyldimethylamine</b>	
Freshwater	4.8 µg/L
Freshwater - Intermittent releases	13.74 µg/L
Marine water	480 ng/L
Sewage Treatment Plant	534 mg/L
Sediment (freshwater)	71 µg/kg
Sediment (marine water)	7.1 µg/kg
Soil	11.4 µg/kg
<b>CAS: 69-72-7 Salicylic acid</b>	
Freshwater	200 µg/L
Freshwater - Intermittent releases	1 mg/L
Marine water	20 µg/L
Sewage Treatment Plant	162 mg/L
Sediment (freshwater)	1.42 mg/kg
Sediment (marine water)	142 µg/kg
Soil	166 µg/kg

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

Ensure that eyewash stations and safety showers are close to the workstation location.

(Contd. on page 6)

## Safety Data Sheet according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

**Trade name: PermaCOAT Epoxy Crack Filler Hardener**

(Contd. of page 5)

- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Hand protection**



Protective gloves.  
Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**  
Nitrile rubber, NBR  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye/face protection**



Safety glasses with side-shields conforming to EN166.  
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

- **Body protection:**



Protective work clothing

Do not get on skin or clothing. Wear clothing and footwear that cannot be penetrated by the product. Suitable protective equipment may include: Chemical resistant boots, Chemical resistant apron, Full chemical protective suit with a hood, Chemical protective suit consisting of a jacket and trousers. The jacket should be buttoned up to the neck, sleeves sealed at the gloves, and trouser legs worn outside the boots. These precautions are required to prevent the clothing from accidentally trapping product against the skin.

- **Environmental exposure controls** Do not allow to enter drains, sewers or watercourses.
- **Risk management measures** The operators shall be instructed adequately.

### SECTION 9: Physical and chemical properties

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

##### · General Information

· <b>Physical state</b>	Liquid
· <b>Colour:</b>	Yellow
· <b>Odour:</b>	Amine-like
· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Boiling point or initial boiling point and boiling range</b>	Undetermined.
· <b>Flammability</b>	Not applicable.
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	1.3 Vol % (CAS: 100-51-6 Benzyl alcohol)
· <b>Upper:</b>	13 Vol % (CAS: 100-51-6 Benzyl alcohol)
· <b>Flash point:</b>	> 93 °C
· <b>Auto-ignition temperature:</b>	> 400 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>Dynamic:</b>	Not determined.
· <b>Solubility</b>	
· <b>water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure at 20 °C:</b>	0.1 hPa (CAS: 100-51-6 Benzyl alcohol)
· <b>Density and/or relative density</b>	
· <b>Density at 20 °C:</b>	1 – 1.1 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.

#### · 9.2 Other information

- **Appearance:**
- **Form:** Liquid

(Contd. on page 7)

## Safety Data Sheet according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

Trade name: PermaCOAT Epoxy Crack Filler Hardener

(Contd. of page 6)

· <b>Important information on protection of health and environment, and on safety.</b>	
· <b>Ignition temperature:</b>	Product is not self-igniting.
· <b>Explosive properties:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· <b>Change in condition</b>	
· <b>Evaporation rate</b>	Not determined.
· <b>Information with regard to physical hazard classes</b>	Not applicable

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** At elevated temperatures, explosive vapour/air mixtures may be formed.
- **10.3 Possibility of hazardous reactions** Exothermic reaction with acids.
- **10.4 Conditions to avoid** Heat and static discharge.
- **10.5 Incompatible materials:**
  - Strong acids.
  - Strong bases.
  - Strong oxidising agents.
- **10.6 Hazardous decomposition products:**
  - Carbon monoxide and carbon dioxide
  - Chlorine compounds
  - Nitrogen oxides (NO<sub>x</sub>)

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Harmful if swallowed.

· **LD/LC50 values relevant for classification:**

**ATE (Acute Toxicity Estimates)**

Oral	LD50	1,409.9 mg/kg
Dermal	LD50	55,333 mg/kg
Inhalative	LC50/4 h	22.907 mg/l (rat)

**CAS: 100-51-6 Benzyl alcohol**

Oral	LD50	1,200 mg/kg (ATE)
		1,620 mg/kg (rat)

**CAS: 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine**

Oral	LD50	1,030 mg/kg (ATE)
------	------	-------------------

**CAS: 1477-55-0 m-phenylenebis(methylamine)**

Oral	LD50	930 mg/kg (rat)
Dermal	LD50	3,100 mg/kg (rat)
Inhalative	LC50/4 h	1.34 mg/l (rat)

**CAS: 103-83-3 Benzylidimethylamine**

Oral	LD50	265 mg/kg (rat)
Dermal	LD50	1,660 mg/kg (rabbit)
Inhalative	LC50/4 h	2.06 mg/l (rat)

**CAS: 69-72-7 Salicylic acid**

Oral	LD50	891 mg/kg (rat)
------	------	-----------------

- **Primary irritant effect:**
- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Additional toxicological information:** May cause sensitisation in susceptible persons.

(Contd. on page 8)

## Safety Data Sheet according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

Trade name: PermaCOAT Epoxy Crack Filler Hardener

(Contd. of page 7)

· **11.2 Information on other hazards**

· **Endocrine disrupting properties**

CAS: 69-72-7 | Salicylic acid

List II; III

### SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

**CAS: 100-51-6 Benzyl alcohol**

EC50 (96 h) | 230 mg/l (Bacteria)

EC50 (72 h) | 770 mg/l (Algae)

**CAS: 2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine**

EC50 (72 h) | 50 mg/l (algae)

**CAS: 1477-55-0 m-phenylenebis(methylamine)**

EC50 (72 h) | 20.3 mg/l (algae)

**CAS: 103-83-3 Benzylidimethylamine**

EC50 (72 h) | 1.34 mg/l (Algae)

· **12.2 Persistence and degradability** Not easily biodegradable

· **12.3 Bioaccumulative potential** Contains components with the potential to bioaccumulate.

· **12.4 Mobility in soil** No further relevant information available.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.

· **12.7 Other adverse effects**

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

### SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

· **Uncleaned packaging:**

· **Recommendation:**

Do not reuse empty containers - dispose of in accordance with the regulations issued by the appropriate local authorities.

Disposal must be made according to official regulations.

Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating.

Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

### SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR, IMDG, IATA**

UN1760

· **14.2 UN proper shipping name**

· **ADR**

UN1760 CORROSIVE LIQUID, N.O.S. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine)

(Contd. on page 9)

## Safety Data Sheet according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

Trade name: PermaCOAT Epoxy Crack Filler Hardener

(Contd. of page 8)

<ul style="list-style-type: none"> <li>· IMDG, IATA</li> </ul>	<p>CORROSIVE LIQUID, N.O.S. (4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine)</p>
<ul style="list-style-type: none"> <li>· 14.3 Transport hazard class(es)</li> <li>· ADR</li> </ul>	<p>8 (C9) Corrosive substances.</p>
	
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>8 8</p>
<ul style="list-style-type: none"> <li>· IMDG, IATA</li> </ul>	<p>8 Corrosive substances.</p>
	
<ul style="list-style-type: none"> <li>· Class</li> <li>· Label</li> </ul>	<p>8 8</p>
<ul style="list-style-type: none"> <li>· 14.4 Packing group</li> <li>· ADR, IMDG, IATA</li> </ul>	<p>II</p>
<ul style="list-style-type: none"> <li>· 14.5 Environmental hazards:</li> </ul>	<p>Not applicable.</p>
<ul style="list-style-type: none"> <li>· 14.6 Special precautions for user</li> <li>· Hazard identification number (Kemler code):</li> <li>· Emergency Action Code:</li> <li>· EMS Number:</li> <li>· Stowage Category</li> <li>· Stowage Code</li> </ul>	<p>Warning: Corrosive substances. 80 2X F-A,S-B B SW2 Clear of living quarters.</p>
<ul style="list-style-type: none"> <li>· 14.7 Maritime transport in bulk according to IMO instruments</li> </ul>	<p>Not applicable.</p>
<ul style="list-style-type: none"> <li>· Transport/Additional information:</li> </ul>	<p>Not applicable.</p>
<ul style="list-style-type: none"> <li>· ADR</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> <li>· Transport category</li> <li>· Tunnel restriction code</li> </ul>	<p>1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml 2 E</p>
<ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	<p>1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· UN "Model Regulation":</li> </ul>	<p>UN 1760 CORROSIVE LIQUID, N.O.S. (4,4'-ISOPROPYLIDENEDIPHENOL, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE, REACTION PRODUCTS WITH 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE, 3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE), 8, II</p>

### SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Poisons Act

· Regulated explosives precursors

None of the ingredients are listed.

(Contd. on page 10)

## Safety Data Sheet

### according to UK REACH (SI 2020/1577) as amended

Printing date 20.10.2025

Version number 1

Revision: 20.10.2025

Trade name: PermaCOAT Epoxy Crack Filler Hardener

(Contd. of page 9)

· <b>Regulated poisons</b>
None of the ingredients are listed.
· <b>Reportable explosives precursors</b>
None of the ingredients are listed.
· <b>Reportable poisons</b>
None of the ingredients are listed.

- **Control Of Major Accident Hazards Regulations 2015 (COMAH)**
- **Named dangerous substances - ANNEX I** None of the ingredients are listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

#### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

##### · **Relevant phrases**

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H361d Suspected of damaging the unborn child.
- H412 Harmful to aquatic life with long lasting effects.

##### · **Training hints**

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

##### · **Department issuing SDS:** Product safety department.

##### · **Abbreviations and acronyms:**

UK- REACH: The UK REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals  
 GB- CLP: Retained GB CLP Regulation (EU) No. 1272/2008 as amended for Great Britain on the Classification, Labelling and Packaging of Chemicals.  
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 DNEL: Derived No-Effect Level (UK REACH)  
 PNEC: Predicted No-Effect Concentration (UK REACH)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 ATE: Acute toxicity estimate values  
 Flam. Liq. 3: Flammable liquids – Category 3  
 Acute Tox. 4: Acute toxicity – Category 4  
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
 Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
 Skin Sens. 1: Skin sensitisation – Category 1  
 Skin Sens. 1A: Skin sensitisation – Category 1A  
 Skin Sens. 1B: Skin sensitisation – Category 1B  
 Repr. 2: Reproductive toxicity – Category 2  
 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3