

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

1.1. Product identifier

Product name: Permagard Epoxy Damp Proof Membrane HARDENER
Product code: ERDPM

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

1.3. Details of the supplier of the safety data sheet

Company name: Permagard Products Limited
Unit B2 – B5 Worthy Road
Chittening Industrial Estate
Avonmouth
Bristol
BS11 0YB
Tel: 0117 982 3282
Fax: 0117 938 1584
Email: Sales@permagard.co.uk

1.4. Emergency telephone number

Emergency tel: 0117 982 3282
9am – 5pm
Monday - Friday

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Acute Tox. 4: H302; Aquatic Chronic 2: H411; Repr. 2: H361f; Skin Corr. 1B: H314; Skin Sens. 1: H317; STOT RE 2: H373
Most important adverse effects: Harmful if swallowed.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Suspected of damaging fertility.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

Label elements:

Hazard statements:

H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H317: May cause an allergic skin reaction.
H361f: Suspected of damaging fertility.
H373: May cause damage to organs through prolonged or repeated exposure.
H411: Toxic to aquatic life with long lasting effects.

Hazard pictograms:

GHS05: Corrosion
GHS07: Exclamation mark
GHS08: Health hazard
GHS09: Environmental



Signal words:

Danger

Precautionary statements:

- P260: Do not breathe dust/fumes/gas/mist/vapours/spray.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P301+312: IF SWALLOWED:
Call a POISON CENTER/doctor/ if you feel unwell.
- P301+330+331: IF SWALLOWED:
Rinse mouth.
Do NOT induce vomiting.
- P302+352: IF ON SKIN:
Wash with plenty of water
- P303+361+353: IF ON SKIN (or hair):
Take off immediately all contaminated clothing.
Rinse skin with water/shower.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

BENZYL ALCOHOL - REACH registered number(s): 01-2119492630-38-XXXX

EINECS	CAS	PBT / WEL	CLP Classification	Percent
202-859-9	100-51-6	-	Acute Tox. 4: H332; Acute Tox. 4: H302	10-30%

TOFA,REACTION PRODUCTS WITH TEPA

-	68953-36-6	-	Skin Corr. 1C: H314; Skin Sens. 1: H317; Aquatic Chronic 1: H410	10-30%
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FORMALDEHYDE,POLYMER WITH BENZENEAMINE ,HYDROGENATED

-	135108-88-2	-	Acute Tox. 4: H302; Skin Sens. 1: H317; STOT RE 2: H373; Aquatic Chronic 3: H412; Skin Corr. 1C: H314	10-30%
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2-PIPERAZIN-1-YLETHYLAMINE - REACH registered number(s): 01-2119471486-30-XXXX

205-411-0	140-31-8	-	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 3: H412	1-10%
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4,4'-ISOPROPYLIDENEDIPHENOL

201-245-8	80-05-7	-	Repr. 2: H361f; STOT SE 3: H335; Eye Dam. 1: H318; Skin Sens. 1: H317	1-10%
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3-AMINOPROPYLDIMETHYLAMINE

203-680-9	109-55-7	-	Flam. Liq. 3: H226; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317	1-10%
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2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

202-013-9	90-72-2	-	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315	1-10%
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3,6,9-TRIAZAUNDECAMETHYLENEDIAMINE

203-986-2	112-57-2	-	Acute Tox. 4: H312; Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Aquatic Chronic 2: H411	1-10%
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4-NONYLPHENOL, BRANCHED - REACH registered number(s): 01-2119510715-45-XXXX

284-325-5	84852-15-3	-	Repr. 2: H361fd; Acute Tox. 4: H302; Skin Corr. 1B: H314; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	1-10%
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SECTION 4: First aid measures

4.1. Description of first aid measures

Skin contact:	Wash immediately with plenty of soap and water. Remove all contaminated clothes and footwear immediately unless stuck to skin.
Eye contact:	Bathe the eye with running water for 15 minutes. Consult a doctor.
Ingestion:	Do not induce vomiting. Wash out mouth with water. Consult a doctor.
Inhalation:	Remove casualty from exposure ensuring one's own safety whilst doing so.

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

Skin contact:	There may be irritation and redness at the site of contact.
Eye contact:	The eyes may water profusely. There may be irritation and redness.
Ingestion:	There may be soreness and redness of the mouth and throat. Corrosive burns may appear around the lips.
Inhalation:	May cause irritation in the respiratory tract
Delayed / immediate effects:	Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment:	Show this safety data sheet to the doctor in attendance. Eye bathing equipment should be available on the premises.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Extinguishing media:	Suitable extinguishing media for the surrounding fire should be used.
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5.2. Special hazards arising from the substance or mixture

Exposure hazards:	In combustion emits toxic fumes.
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5.3. Advice for fire-fighters

Advice for fire-fighters:

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for Disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements:

Ensure there is sufficient ventilation of the area. Avoid direct contact with the substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area.
Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s): No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

4,4'-ISOPROPYLIDENEDIPHENOL

Workplace exposure limits:

Respirable dust

State	8 Hour TWA	15 Min. STEL	8 Hour TWA	15 min. STEL
UK	5 mg/m ³	5 mg/m ³	-	-

DNEL/PNEC Values

Hazardous ingredients:

2-PIPERAZIN-1-YLETHYLAMINE

Type	Exposure	Value	Population	Effect
DNEL	Dermal	20mg/kg	Workers	-
DNEL	Inhalation	21.4mg/m ³	Workers	-

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.
Respiratory protection: Gas/vapour filter, type A: organic vapours (EN141).
Hand protection: Nitrile gloves.
Eye protection: Safety glasses.
Skin protection: Protective clothing.
Environmental: Refer to specific Member State legislation for requirements under Community environmental legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:	Liquid	
Colour:	Amber	
Odour:	Ammoniacal	
Evaporation rate:	No data available.	
Oxidising:	No data available.	
Solubility in water:	Slightly soluble	
Viscosity:	Non-viscous	
Boiling point/range°C:	No data available.	Melting point/range°C: No data available.
Flammability limits %:	lower: No data available.	upper: No data available.
Flash point°C:	>122	Part.coeff. n-octanol/water: No data available.
Autoflammability°C:	No data available.	Vapour pressure: No data available.
Relative density:	0.99 - 1.01 g/cm ³	pH: No data available.
VOC g/l:	236 g/l	

9.2. Other information

Other information: No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

10.4. Conditions to avoid

Conditions to avoid: Heat. Flames.

10.5. Incompatible materials

Materials to avoid: Acids.
Oxidising agents.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

BENZYL ALCOHOL

IVN	RAT	LD50	53	Mg/kg
ORL	MUS	LD50	1360	Mg/kg
ORL	RAT	LD50	1230	Mg/kg

2-PIPERAZIN-1-YLETHYLAMINE

DERMAL	RBT	LD50	866	Mg/kg
ORAL	RAT	LD50	>1470	Mg/kg
ORAL	RBT	LD50	2097	Mg/kg

4,4'-ISOPROPYLIDENEDIPHENOL

ORL	MUS	LD50	2400	Mg/kg
ORL	RAT	LD50	3250	Mg/kg

3-AMINOPROPYLDIMETHYLAMINE

ORL	RAT	LD50	1870	mg/kg
SKN	RBT	LD50	600	µl/kg

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

ORL	RAT	LD50	1200	mg/kg
SKN	RAT	LD50	1280	mg/kg

3,6,9-TRIAZAUNDECAMETHYLENEDIAMINE

IPR	RAT	LD50	205	mg/kg
IVN	MUS	LD50	320	mg/kg
ORL	RAT	LD50	3990	mg/kg

4-NONYLPHENOL, BRANCHED

ORL	RAT	LD50	1300	mg/kg
SKN	RBT	LDLO	3160	mg/kg

Relevant hazards for substance:

HAZARD	ROUTE	BASIS
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	DRM	Hazardous: calculated
Reproductive toxicity	-	Hazardous: calculated
STOT-repeated exposure	-	Hazardous: calculated

Symptoms / routes of exposure

Skin contact:	There may be irritation and redness at the site of contact.
Eye contact:	The eyes may water profusely. There may be irritation and redness.
Ingestion:	There may be soreness and redness of the mouth and throat. Corrosive burns may appear around the lips.
Inhalation:	May cause irritation in the respiratory tract
Delayed / immediate effects:	Immediate effects can be expected after short-term exposure.
Other information:	Not applicable.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations:	Transfer to a suitable container and arrange for collection by specialised disposal company.
Disposal of packaging:	Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.
NB:	The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

14.1. UN number

UN number: UN2735

14.2. UN proper shipping name

Shipping name: AMINES, LIQUID, CORROSIVE, N.O.S.

14.3. Transport hazard class(es)

Transport class: 8

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: No Marine pollutant: No

14.6. Special precautions for user

Tunnel code: E

Transport category: 3

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

SECTION 16: Other information

Other information

Other information:

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

Phrases used in s.2 and s.3:

H226:	Flammable liquid and vapour.
H302:	Harmful if swallowed.
H312:	Harmful in contact with skin.
H314:	Causes severe skin burns and eye damage.
H315:	Causes skin irritation.
H317:	May cause an allergic skin reaction.
H318:	Causes serious eye damage.
H319:	Causes serious eye irritation.
H332:	Harmful if inhaled.
H335:	May cause respiratory irritation.
H361f:	Suspected of damaging fertility.
H361fd:	Suspected of damaging fertility.
	Suspected of damaging the unborn child.
H373:	May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H410:	Very toxic to aquatic life with long lasting effects.
H411:	Toxic to aquatic life with long lasting effects.
H412:	Harmful to aquatic life with long lasting effects.

Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.