PermaCOAT Liquid Epoxy DPM - BASE
Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH), as amended

Date of issue: 26/10/2026 Revision date: 26/10/2026 Version: 1.0

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

1.1. Product identifier

Product name: PermaCOAT Liquid Epoxy DPM BASE

Product code: ERDPMT

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

Use: Base component of liquid epoxy damp proof membrane.

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 Telephone Number: 0117 982 3282
9am - 5pm
Monday - Friday

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Skin Sens. 1, Skin Irrit. 2, Eye Irrit. 2, Repr. Cat. 1B, Aquatic Chronic 2

Most important adverse effects: May damage fertility. Suspected of damaging the unborn child.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard statements: H360Fd - May damage fertility. Suspected of damaging the unborn child.
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.

Hazard pictograms: GHS08: Health hazard
GHS09: Environmental
GHS07: Exclamation mark



Signal word: Danger

Precautionary statements:

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P405 - Store locked up.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P281 - Use personal protective equipment as required.
P201 - Obtain special instructions before use.
P264 - Wash hands thoroughly after handling. Dispose of contents/container to an authorised waste collection point.

2.3. Other hazards

Other hazards: Contains: Bis-[4-(2,3-epoxipropoxi)phenyl]propane
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE - REACH registration number: 01-2119456619-26-0006

EINECS	CAS	PBT / WEL	CLP Classification	Percent
216-823-5	1675-54-3	-	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2; H Statements: H315, H317, H319, H411	20 - 40%

Specific Concentration Limits: No information available; M factor: No information available; Acute toxicity estimate: Not available; Symbols: GHS09, GHS07

BISPHENOL F DIGLYCIDYL ETHER, REACTION MASS OF ISOMERS - REACH registration number: 01-2119454392-40-0003

EINECS	CAS	PBT / WEL	CLP Classification	Percent
701-263-0	-	-	Skin Irrit. 2, Skin Sens. 1A, Aquatic Chronic 2; H Statements: H315, H317, H411	10 - 20%

Specific Concentration Limits: No information available; M factor: No information available; Acute toxicity estimate: Not available; Symbols: GHS09, GHS07

OXIRANE, MONO[(C12-14-ALKYLOXY)METHYL] DERIVS. - REACH registration number: 01-2119485289-22-0005

EINECS	CAS	PBT / WEL	CLP Classification	Percent
271-846-8	68609-97-2	-	Skin Irrit. 2, Skin Sens. 1, Repr. Cat. 1B; H Statements: H315, H317, H360F	5 - 10%

Specific Concentration Limits: No information available; M factor: No information available; Acute toxicity estimate: Not available; Symbols: GHS08

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT; KEROSINE - UNSPECIFIED - REACH registration number: 01-2119485032-45

EINECS	CAS	PBT / WEL	CLP Classification	Percent
265-149-8	64742-47-8	-	Asp. Tox. 1; H Statements: H304	< 1%

Specific Concentration Limits: None assigned; M factor: No information available; Acute toxicity estimate: Not available; Symbols: GHS08

POLYAMINE AMIDE SALT

EINECS	CAS	PBT / WEL	CLP Classification	Percent
-	-	-	Skin Irrit. 2; H Statements: H315	< 0.5%

Specific Concentration Limits: No information available; M factor: No information available; Acute toxicity estimate: Not available; Symbols: None

ETHYLBENZENE - REACH registration number: 01-2119489370-35

EINECS	CAS	PBT / WEL	CLP Classification	Percent
202-849-4	100-41-4	-	Acute Tox. 4, STOT RE 2; H Statements: H225, H332, H304, H373	< 0.1%

Specific Concentration Limits: No information available; M factor: No information available; Acute toxicity estimate: Not available; Symbols: GHS02, GHS07, GHS08

2-METHYLPROPAN-1-OL; ISO-BUTANOL - REACH registration number: 01-2119484609-23

EINECS	CAS	PBT / WEL	CLP Classification	Percent
201-148-0	78-83-1	-	Skin Irrit. 2, Eye Dam. 1, STOT SE 3; H Statements: H226, H335, H315, H318, H336	< 0.02%

Specific Concentration Limits: No information available; M factor: No information available; Acute toxicity estimate: Not available; Symbols: GHS02, GHS05, GHS07

SILICA SAND

EINECS	CAS	PBT / WEL	CLP Classification	Percent
238-878-4	14808-60-7	-	Not Classified; H Statements: None	30 - 60%

Specific Concentration Limits: No information available; M factor: No information available; Acute toxicity estimate: Not available; Symbols: None

N-METHYL-2-PYRROLIDONE; 1-METHYL-2-PYRROLIDONE - REACH registration number: 01-2119472430-46

EINECS	CAS	PBT / WEL	CLP Classification	Percent
212-828-1	872-50-4	-	Skin Irrit. 2, Eye Irrit. 2, Repr. Cat. 1B, STOT SE 3; H Statements: H360D, H319, H335, H315	< 0.1%

Specific Concentration Limits: No information available; M factor: No information available; Acute toxicity estimate: Not available; Symbols: GHS08, GHS07

TOLUENE - REACH registration number: 01-2119471310-51

EINECS	CAS	PBT / WEL	CLP Classification	Percent
203-625-9	108-88-3	-	Skin Irrit. 2; Repr. 2; STOT SE 3; STOT RE 2; H Statements: H225, H361d, H304, H373, H315, H336	< 0.0015%

Specific Concentration Limits: None assigned; M factor: No information available; Acute toxicity estimate: Not available; Symbols: GHS02, GHS08, GHS07

XYLENE - REACH registration number: 01-2119488216-32

EINECS	CAS	PBT / WEL	CLP Classification	Percent
215-535-7	1330-20-7	-	Flam. Liq. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H Statements: H226, H312, H332, H373, H335, H315, H319, H304	< 0.2%

Specific Concentration Limits: None assigned; M factor: No information available; Acute toxicity estimate: Not available; Symbols: GHS02, GHS07

2,6-DI-TERT-BUTYL-P-CRESOL - REACH registration number: 01-2119565113-46

EINECS	CAS	PBT / WEL	CLP Classification	Percent
204-881-4	128-37-0	-	Aquatic Chronic 1; H Statements: H410	< 0.005%

Specific Concentration Limits: None assigned; M factor: 1; Acute toxicity estimate: Not available; Symbols: GHS09

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Apply artificial respiration only if patient is not breathing but do not use mouth to mouth resuscitation IF exposed or concerned: Get medical advice/attention. Seek medical attention if ill effects occur
Skin contact:	May cause irritation to skin. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. IF exposed or concerned: Get medical advice/attention.
Eye contact:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention.
Ingestion:	If swallowed, rinse mouth with water (only if the person is conscious) Do NOT induce vomiting. Never give anything by mouth to an unconscious person IF exposed or concerned: Get medical advice/attention.

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

General information:	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
Eye contact:	Irritating to eyes
Skin contact:	Irritating to skin May cause an allergic skin reaction.
Inhalation:	delayed effects can be expected after long-term exposure.

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

Immediate / special treatment:	Treat symptomatically Contact poison treatment specialist

SECTION 5: Firefighting measures

5.1. Extinguishing media

Extinguishing media:	Extinguish with foam, carbon dioxide, dry powder or water spray. Do not use water jets

5.2. Special hazards arising from the substance or mixture

Exposure hazards:	Decomposition products may include nitrogen and carbon oxides Decompoition products may include halogenated compounds

5.3. Advice for fire-fighters

Advice for fire-fighters:	In case of fire: Evacuate area. Wear chemical protection suit and positive-pressure breathing apparatus

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions:	Ensure adequate ventilation Wear suitable protective clothing Avoid contact with skin and eyes Avoid breathing dust/fume/gas/mist/vapours/spray. Wash thoroughly after dealing with spillage Evacuate the area and keep personnel upwind

6.2. Environmental precautions

Environmental precautions:	Do not allow to enter public sewers and watercourses If polluted water reaches drainage systems or water courses, immediately inform appropriate authorities Avoid release to the environment. Prevent further spilage if safe

6.3. Methods and material for containment and cleaning up

Clean-up procedures:	Avoid release to the environment.

Collect as much as possible in clean container for reuse or disposal
Soak up with inert absorbent
Place in appropriate container
Wear suitable protective clothing, eye/face protection and gloves
Collect spillage.

6.4. Reference to other sections

Reference to other sections: For personal protection see section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements:
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid contact with skin and eyes
Do not breathe dust/fume/gas/mist/vapours/spray.
Ensure adequate ventilation
Avoid contact with foodstuffs
Wash contaminated clothing before reuse.
Dispose of contents/container to an authorised waste collection point
Store in original, correctly labelled and tightly closed containers
Avoid contact during pregnancy and while nursing.
Do not handle until all safety precautions have been read and understood.
Do not reuse empty containers
Keep away from food, drink and animal foodstuffs

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions:
Keep away from food, drink and animal feedingstuffs
Store in original, correctly labelled and tightly closed containers
Store between + 5° C and +35°C protect from frost and direct sunlight.
Store in a dry place.
Store locked up.

7.3. Specific end use(s)

Specific end use(s): No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Table key: DNEL = derived no-effect level; PNEC = predicted no-effect concentration; WEL = workplace exposure limit; ILV = indicative limit value. TWA = time-weighted average; STEL = short-term exposure limit.

BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	dermal	Short term	Workers	systemic exposure: 8.3 mg/kg bw/day
DNEL	inhalation	Short term	Workers	systemic exposure: 12.3 mg/m³
DNEL	dermal	Long term	Workers	systemic exposure: 8.3 mg/kg bw/day
DNEL	inhalation	Long term	Workers	systemic exposure: 12.3 mg/m³

BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	dermal	Short term	General population	systemic exposure: 3.6 mg/kg bw/day
DNEL	inhalation	Short term	General population	systemic exposure: 0.75 mg/m³
DNEL	oral	Short term	General population	systemic exposure: 0.75 mg/kg bw/day
DNEL	dermal	Long term	General population	systemic exposure: 3.6 mg/kg bw/day

BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	inhalation	Long term	General population	systemic exposure: 0.75 mg/m³
DNEL	oral	Long term	General population	systemic exposure: 0.75 mg/kg bw/day

BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
PNEC	Fresh Water	-	-	6 µg/l
PNEC	Marine	-	-	1 µg/l
PNEC	Sewage Treatment Plant	-	-	10 mg/l
PNEC	Fresh water sediment	-	-	0.341 mg/kg dw
PNEC	Marine water sediment	-	-	0.341 mg/kg dw
PNEC	Soil	-	-	0.065 mg/kg dw

BISPHENOL F DIGLYCIDYL ETHER, REACTION MASS OF ISOMERS				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	dermal	Short term	Workers	local exposure: 8.3 µg/cm²
DNEL	dermal	Long term	Workers	systemic exposure: 104.15 mg/kg bw/day
DNEL	inhalation	Long term	Workers	systemic exposure: 29.39 mg/m³

BISPHENOL F DIGLYCIDYL ETHER, REACTION MASS OF ISOMERS				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	dermal	Long term	General population	systemic exposure: 62.5 mg/kg bw/day
DNEL	inhalation	Long term	General population	systemic exposure: 8.7 mg/m³
DNEL	oral	Long term	General population	systemic exposure: 6.25 mg/kg bw/day

OXIRANE, MONO[(C12-14-ALKYLOXY)METHYL] DERIVS.				
Type	**Exposure**	**Duration**	**Population**	**Effect**
PNEC	Soil	-	-	61.42 mg/kg dw

WEL (Workplace Exposure limits):

XYLENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
WEL	-	TWA	Workers	50 ppm (TWA)
WEL	-	TWA	Workers	220 mg/m³ (TWA) (skin)
WEL	-	STEL	Workers	100 ppm (STEL)
WEL	-	STEL	Workers	441 mg/m³ (STEL)

ILV (Indicative Limit Values):

XYLENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
ILV	-	TWA	Workers	50 ppm (TWA)
ILV	-	TWA	Workers	221 mg/m³ (TWA)
ILV	-	STEL	Workers	100 ppm (STEL)
ILV	-	STEL	Workers	442 mg/m³ (STEL)

Biological Exposure Limit(s): Biological Monitoring Guidance 650 mmol/mol creatinine medium: urin time: post shift parameter: Methyl Values (United Kingdom) hippuric acid Biological Exposure Indices (ACGIH): 1.5 g/g creatinine (urine - end of shift)

XYLENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	inhalation	Short term	Workers	systemic exposure: 442 mg/m³
DNEL	inhalation	Short term	Workers	local exposure: 442 mg/m³
DNEL	dermal	Long term	Workers	systemic exposure: 212 mg/kg

XYLENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	inhalation	Long term	Workers	systemic exposure: 221 mg/m³
DNEL	inhalation	Long term	Workers	local exposure: 221 mg/m³

XYLENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	inhalation	Short term	General population	systemic exposure: 260 mg/m³
DNEL	inhalation	Short term	General population	local exposure: 260 mg/m³
DNEL	dermal	Long term	General population	systemic exposure: 125 mg/kg/day
DNEL	inhalation	Long term	General population	systemic exposure: 65.3 mg/m³
DNEL	inhalation	Long term	General population	local exposure: 65.3 mg/m³
DNEL	Oral	Long term	General population	systemic exposure: 12.5 mg/kg/day

XYLENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
PNEC	Fresh water	-	-	0.327 mg/l
PNEC	Intermittent water release	-	-	0.327 mg/l
PNEC	Marine water	-	-	0.327 mg/l
PNEC	Sewage treatment plant	-	-	6.58 mg/l
PNEC	Sediment (fresh water)	-	-	12.46 mg/kg
PNEC	Sediment (marine water)	-	-	12.46 mg/kg
PNEC	Soil	-	-	2.31 mg/kg

WEL (Workplace Exposure limits):

ETHYLBENZENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
WEL	-	TWA	Workers	100 ppm (TWA)
WEL	-	TWA	Workers	441 mg/m³ (TWA) (skin)
WEL	-	STEL	Workers	125 ppm (STEL)
WEL	-	STEL	Workers	552 mg/m³ (STEL)

ILV (Indicative Limit Values):

ETHYLBENZENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
ILV	-	TWA	Workers	100 ppm (TWA)
ILV	-	TWA	Workers	442 mg/m³ (TWA)
ILV	-	STEL	Workers	200 ppm (STEL)
ILV	-	STEL	Workers	884 mg/m³ (STEL)

Biological Exposure Limit(s): Biological Exposure Indices (ACGIH): 0.15 g/g creatinine (urine - end of shift)

ETHYLBENZENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	dermal	Long term	Workers	systemic exposure: 180 mg/kg/day
DNEL	inhalation	Long term	Workers	systemic exposure: 77 mg/m³
DNEL	inhalation	Long term	Workers	local exposure: 293 mg/m³

ETHYLBENZENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	inhalation	Long term	General population	systemic exposure: 15 mg/m³
DNEL	Oral	Long term	General population	systemic exposure: 1.6 mg/kg/day

ETHYLBENZENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
PNEC	Fresh water	-	-	0.1 mg/l
PNEC	Intermittent water release	-	-	0.1 mg/l
PNEC	Marine water	-	-	0.01 mg/l
PNEC	Sewage treatment plant	-	-	9.6 mg/l
PNEC	Sediment (fresh water)	-	-	13.7 mg/kg
PNEC	Sediment (marine water)	-	-	1.37 mg/kg
PNEC	Soil	-	-	2.68 mg/kg
PNEC	Oral (secondary poisoning)	-	-	20 mg/kg food

WEL (Workplace Exposure limits):

TOLUENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
WEL	-	TWA	Workers	50 ppm (TWA)
WEL	-	TWA	Workers	191 mg/m³ (TWA) (skin)
WEL	-	STEL	Workers	100 ppm (STEL)
WEL	-	STEL	Workers	384 mg/m³ (STEL)

ILV (Indicative Limit Values):

TOLUENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
ILV	-	TWA	Workers	50 ppm (TWA)
ILV	-	TWA	Workers	192 mg/m³ (TWA)
ILV	-	STEL	Workers	100 ppm (STEL)
ILV	-	STEL	Workers	384 mg/m³ (STEL)

Biological Exposure Limit(s): Biological Exposure Indices (ACGIH): 0.3 mg/g creatinine (urine - end of shift) 0.02 mg/l (blood - prior to last shift of workweek) 0.03 mg/l (urine - end of shift)

TOLUENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	inhalation	Short term	Workers	systemic exposure: 384 mg/m³
DNEL	inhalation	Short term	Workers	local exposure: 384 mg/m³
DNEL	dermal	Long term	Workers	systemic exposure: 384 mg/kg/day
DNEL	inhalation	Long term	Workers	systemic exposure: 192 mg/m³
DNEL	inhalation	Long term	Workers	local exposure: 192 mg/m³

TOLUENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	inhalation	Short term	General population	systemic exposure: 260 mg/m³
DNEL	inhalation	Short term	General population	local exposure: 260 mg/m³
DNEL	dermal	Long term	General population	systemic exposure: 125 mg/kg/day
DNEL	inhalation	Long term	General population	systemic exposure: 65.3 mg/m³
DNEL	inhalation	Long term	General population	local exposure: 65.3 mg/m³
DNEL	Oral	Long term	General population	systemic exposure: 12.5 mg/kg/day

TOLUENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
PNEC	Fresh water	-	-	0.68 mg/l
PNEC	Marine water	-	-	0.68 mg/l

TOLUENE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
PNEC	Sewage treatment plant	-	-	13.61 mg/l
PNEC	Sediment (fresh water)	-	-	16.39 mg/kg
PNEC	Sediment (marine water)	-	-	16.39 mg/kg
PNEC	Soil	-	-	2.89 mg/kg

N-METHYL-2-PYRROLIDONE; 1-METHYL-2-PYRROLIDONE				
Type	**Exposure**	**Duration**	**Population**	**Effect**
DNEL	-	-	Workers	Inhalation: 14.4 mg/m³
DNEL	-	-	Workers	Dermal: 4.8 mg/kg/day

8.2. Exposure controls

Exposure controls:

Contaminated work clothing should not be allowed out of the workplace.
Wear suitable protective clothing, eye/face protection and gloves
Ensure adequate ventilation
Do not eat, drink or smoke when using this product.
Keep away from food, drink and animal feedingstuffs
Wash thoroughly after handling.
Provide eyewash station. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes wet or contaminated.
In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	Colour:	Grey
Odour:	Characteristic odour	Melting point/Range:	Not available
Boiling Point/Range:	No information available	Flammability:	No information available
Lower explosive limit:	NA% (in air)	Upper explosive limit:	NA% (in air)
Flashpoint:	>93°C	Autoignition Temperature:	NA
Decomposition temperature:	NA	pH:	No information available
Kinematic viscosity:	NA mm²/s	Solubility:	NA
Vapour Pressure:	Not available	Density:	1.450 - 1.550 g/cm³
Vapour Density:	Not available	Particle characteristics:	NA
Solubility in water:	Immiscible with water		

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No information available

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity: No hazardous reactions known if used for its intended purpose

10.2. Chemical stability

Chemical stability: Considered stable under normal conditions

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions may occur under certain conditions of storage or use. Considerable exothermic reaction can occur when mixed with epoxide hardeners.

10.4. Conditions to avoid

Conditions to avoid: Avoid freezing.
Avoid exposure to high temperature or direct sunlight.
Caustic soda can induce vigorous polymerisation at temperatures around 200 °C

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents
Strong acids.
Sodium Hydroxide (Caustic soda)

10.6. Hazardous decomposition products

Haz. decomp. products: Decomposition products may include nitrogen and carbon oxides
Polymerises exothermically with amines, mercaptans and Lewis acids at ambient temperature and above. Polymerises in contact with caustic soda. Reacts exothermically with bases, ammonia, primary and secondary amines, alcohols, water and acids. Reacts with strong oxidizing agents.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Table key: ORL = oral; DRM = dermal; SKN = skin; INH = inhalation. RAT = rat; RBT = rabbit; MUS = mouse. LD50 / LC50 = median lethal dose / concentration; ATE = acute toxicity estimate.

BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE

Acute toxicity:

Route	Species	Endpoint	Value	Unit
ORL	RAT	LD50	11,400	mg/kg
DRM	RAT	LD50	2,000	mg/kg

Acute toxicity estimates:

Route	Species	Endpoint	Value	Unit
ORL	-	ATE	11400	mg/kg

Irritation/corrosion:

Test / observation	Result / score	Exposure / observation time
Skin, Erythema/eschar, 404 Acute Dermal, Irritation/Corrosion (rabbit):	Score: 1.5 - 2.0	-
Skin, Edema, 404 Acute Dermal, Irritation/Corrosion (rabbit):	Score: 1.0 - 1.5	-
Eyes, 405 Acute Eye, Irritation/corrosion (rabbit):	Score: 0	-
Eyes, Redness of the conjunctivae (rabbit):	-	Exposure: 24 hrs
Skin, Moderate Irritant (rabbit):	-	Exposure: 24hrs

Sensitization: Remarks: In an OECD No. 429 mouse LLNA study the estimated EC3 was a concentration of 5.7% suggesting that BADGE is a moderate skin sensitizer in this test system.

In an OECD No. 406 guinea pig Maximization study BADGE induced positive dermal reaction in 100% of the test animals at a 50% concentration challenge dose.

Therefore, BADGE is an "Extreme" skin sensitizer under the conditions of this study.

BADGE was also positive for skin sensitization in an OECD No. 406 guinea pig Buehler method study.

Mutagenicity: Remarks: Did not induce evidence of chromosome damage in a mouse dominant lethal oral gavage study conducted up to a high dose level of 10 grams/kg and in a mouse micronucleus test conducted up to a high dose of 5000 mg/kg.

Negative in a male mouse spermatocyte cytogenetic assay with treatment for 5 days by oral gavage up to a high dose of 3000 mg/kg.

Did not induce an increase in the frequency of chromosome damage in a Chinese hamster bone marrow cytogenetic test by oral gavage up to a high dose of 3300 mg/kg.
Failed to induce an increase of DNA strand breaks in rat liver cells following oral gavage treatment with 500 mg/kg as measured by alkaline elution.

BISPHENOL F DIGLYCIDYL ETHER, REACTION MASS OF ISOMERS

Acute toxicity:

Route	Species	Endpoint	Value	Unit
ORL	RAT	LD50	> 2,000	mg/kg
DRM	RBT	LD50	> 2,000	mg/kg

Irritation/corrosion:

Test / observation	Result / score	Exposure / observation time
Skin, Erythema/Eschar, 404 Acute Dermal, Irritation/Corrosion (rabbit):	Score: 0.7	Exposure: 4hrs Observation: 72 hrs
Skin, Edema, 404 Acute Dermal, Irritation/Corrosion (rabbit):	Score: 0	Exposure: 4hrs Observation: 4 - 504 hrs
Eyes, Cornea opacity, 405 Acute Eye, Irritation/Corrosion (rabbit):	Score: 0	Observation: 1 - 168 hrs
Eyes, Iris lesion, 405 Acute Eye, Irritation/Corrosion (rabbit):	Score: 0	Observation: 1 - 168 hrs
Eyes, Redness of the conjunctivae, 405 Acute Eye, Irritation/Corrosion (rabbit):	Score: 0	Observation: 1 - 168 hrs
Eyes, Edema of the conjunctivae, 405 Acute Eye, Irritation/Corrosion (rabbit):	Score: 0	Observation: 1 - 168 hrs
Skin, Mild irritant (rabbit):	-	Exposure: 24 hrs

Mutagenicity: Remarks: When Bisphenol F Diglycidylether was evaluated for genotoxicity potential in multiple GLP in vivo assays including the mouse micronucleus, rat in vivo/in vitro UDS and MutaMouse tests no evidence of genotoxicity was observed.

The results of other in vivo tests for genotoxicity also supported these negative findings for BPFDGE.

Therefore, Bisphenol F Diglycidylether is not genotoxic in vivo.

OXIRANE, MONO[(C12-14-ALKYLOXY)METHYL] DERIVS.

Acute toxicity:

Route	Species	Endpoint	Value	Unit
ORL	RAT	LD50	17,100	mg/kg
DRM	RBT	LD50	> 4,000	mg/kg

Acute toxicity estimates: Oral; 11400 mg/kg

Irritation/corrosion:

Test / observation	Result / score	Exposure / observation time
Skin, Primary dermal irritation, index (PDII) OTS 798, 4470 Acute Dermal Irritation (rabbit):	Score: 4.1	Exposure: 24 hrs Observation: 72 hrs
Skin, Primary, dermal irritation, index (PDII) 404, Acute Dermal, Irritation/Corrosion (rabbit):	Score: 5.75	Exposure: 24 hrs Observation: 72 hrs
Eyes, Cornea opacity, 405 Acute Eye, Irritation/Corrosion (rabbit):	Score: 2	Observation: 1 - 24 hrs
Skin, Moderate irritant (rabbit):	-	Exposure: 24 hrs

Sensitization: Remarks: Sensitizing in a U.S. E.P.A. OTS test guideline no. 870.2600 Buehler method study demonstrating positive dermal reactions in 20/20 guinea pigs.

An extreme sensitizer in an O.E.C.D. test guideline no. 406 guinea pig Maximization study

Reproductive toxicity: Fertility: Positive
Species: Rat
Dose: Oral: 10 mg/kg/d Repeated dose 443 Extended One-Generation Reproductive Toxicity Study

Potential chronic health effects: NOAEL Dermal (rat) 1 mg/kg/d Repeated dose 411 Subchronic Dermal Toxicity: 90-day Study

Endocrine disrupting properties: No information available

Information on other hazards: No information available

SECTION 12: Ecological information

12.1. Toxicity

Table key: LC50 / EC50 = median lethal / effect concentration; NOEC = no observed effect concentration. Values and units are shown as supplied.

BIS-[4-(2,3-EPOXIPROPOXI)PHENYL]PROPANE

Species / test	Endpoint	Value	Unit
203, Fish, Acute Toxicity Test (fish): Exposure: 96 hrs	Acute LC50	1.3	mg/l
203, Fish, Acute Toxicity Test (fish): Exposure: 96 hrs	Acute LC50	1.3	mg/l
202, Daphnia sp. Acute, Immobilization Test and reproduction test (water flea): Exposure: 84 hrs	Acute EC50	2.1	mg/l
(algae) Exposure: 72 hrs	Acute LC50	> 11	mg/l
semi-static test 211 Daphnia Magna Reproduction Test (water flea): Exposure: 21 d	Chronic NOEC	0.3	mg/l

BISPHENOL F DIGLYCIDYL ETHER, REACTION MASS OF ISOMERS

Species / test	Endpoint	Value	Unit
(fish) Exposure: 96 hrs	Acute LC50	2.54	mg/l
202 Daphnia sp. Acute Immobilization Test and Reproduction Test (water flea); Exposure: 48 hrs	Acute EC50	2.55	mg/l
201, Alga, Growth Inhibition Test (algae): Exposure: 72 hrs	Acute EC50	> 1,000	mg/l

OXIRANE, MONO[(C12-14-ALKYLOXY)METHYL] DERIVS

Species / test	Endpoint	Value	Unit
203, Fish, Acute Toxicity Test (Rainbow trout, donaldson trout): Exposure: 96 hrs	Acute LC50	> 1.8	g/l
203, Fish, Acute Toxicity Test (Bluegill): Exposure: 96 hrs	Acute LC50	> 5	g/l
203, Fish, Acute Toxicity Test (Rainbow trout, donaldson trout): Exposure: 96 hrs	Acute LC50	> 100	mg/l
202, Daphnia sp. Acute, Immobilization Test and, Reproduction Test (water flea): Exposure: 48 hrs	Acute EC50	7.2	mg/l
201, Alga, Growth Inhibition Test (algae): Exposure: 72 hrs	Acute EC50	> 844	mg/l

XYLENE

Species / test	Endpoint	Value	Unit
Pimephales promelas (96h)	LC50	= 13.4	mg/L
Oncorhynchus mykiss (96h)	LC50	2.661 - 4.093	mg/L
Oncorhynchus mykiss (96h)	LC50	13.5 - 17.3	mg/L
Lepomis macrochirus (96h)	LC50	13.1 - 16.5	mg/L
Lepomis macrochirus (96h)	LC50	19	mg/L
Lepomis macrochirus (96h)	LC50	7.711 - 9.591	mg/L
Pimephales promelas (96h)	LC50	23.53 - 29.97	mg/L
Cyprinus carpio (96h)	LC50	780	mg/L
Cyprinus carpio (96h)	LC50	> 780	mg/L
Poecilia reticulata (96h)	LC50	30.26 - 40.75	mg/L
water flea (48h)	EC50	3.82	mg/l
Gammarus lacustriss (48h)	LC50	0.6	mg/l

ETHYLBENZENE

Species / test	Endpoint	Value	Unit
Oncorhynchus mykiss (96h)	LC50	11.0 - 18.0	mg/L
Oncorhynchus mykiss (96h)	LC50	= 4.2	mg/L
Pimephales promelas (96h)	LC50	7.55 - 11	mg/L
Lepomis macrochirus (96h)	LC50	= 32	mg/L
Pimephales promelas (96h)	LC50	9.1 - 15.6	mg/L
Poecilia reticulata (96h)	LC50	= 9.6	mg/L
Daphnia magna (48h)	EC50	1.8 - 2.4	mg/L
Pseudokirchneriella subcapitata (72h)	EC50	= 4.6	mg/L
Pseudokirchneriella subcapitata (96h)	EC50	> 438	mg/L
Pseudokirchneriella subcapitata (72h)	EC50	2.6 - 11.3	mg/L
Pseudokirchneriella subcapitata (96h)	EC50	1.7 - 7.6	mg/L

TOLUENE

Species / test	Endpoint	Value	Unit
Oncorhynchus kisutch (96h)	LC50	= 5.5	mg/L
Oncorhynchus kisutch (40d)	NOEC	= 1.4	mg/L
Ceriodaphnia dubia (48h)	EC50	= 3.78	mg/L
Ceriodaphnia dubia(7d)	NOEC	= 0.74	mg/L
Chlorella vulgaris (3h) - reduced photosynthesis rate	EC50	= 134	mg/L
skeletonema costatum (72h)	NOEC	= 10	mg/L

12.2. Persistence and degradability

Persistence and degradability: No information available

12.3. Bioaccumulative potential

Bioaccumulative potential: bis-[4-(2,3-epoxipropoxi)phenyl]propane
LogPow: 2.64 - 3.78
BCF: 3 - 31
Potential: Low
Bisphenol F diglycidyl ether, reaction mass of isomers
LogPow: 3.3

BCF: 150
Potential: Low
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
LogPow: 3.77
BCF: 160 - 263
Potential: Low

12.4. Mobility in soil

Mobility: No information available

12.5. Results of PBT and vPvB assessment

PBT identification: No information available
Endocrine disrupting properties
No information available

12.6. Other adverse effects

Other adverse effects: No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Disposal should be in accordance with local, state or national legislation
Avoid release to the environment. Refer to special instructions/Safety data sheets
Do not empty into drains - dispose of this material and container in a safe way
Dispose of contents/container to an authorised waste collection point
Small quantities of product may be treated with an equivalent quantity of product hardener, allowed to cure and disposed of as low hazard waste. Large quantities should be disposed of via liscensed waste operators to an approed incineration unit. Product containers must not be re -used without commercial cleaning.

SECTION 14: Transport information

The transport classifications below apply to air (ICAO/IATA), road/rail (ADR/RID) and sea (IMDG).

14.1. UN number

UN number: 3082

14.2. UN proper shipping name

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es)

Transport hazard class: 9

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmental hazards: Marine Pollutant

14.6. Special precautions for user

Contains: Bis-[4-(2,3-epoxipropoxi)phenyl]propane
Bisphenol F diglycidyl ether, reaction mass of isomers

14.7. Maritime transport in bulk

Annex II of MARPOL / IBC Code: No information available
IMO instruments: No information available

SECTION 15: Regulatory information

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

Specific regulations: This Safety Data Sheet is provided in compliance with the EC Regulations 1907/2006, 1272/2008, 2015/830 and 2020/878 Prohibition/Restriction REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:
CAS Number: 100-41-4 and 1330-20-7 (Entry Number 40) - Not Applicable.
CAS Number: 108-88-3 (Entry Number 48) - Not Applicable
CAS Number: 872-50-4 (Entry Number 71)
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : None.
REACH - List of substances subject to authorisation (Annex XIV) : None.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment (CSA) for this product has not yet been completed

SECTION 16: Other information

Other information

Other information: Prepared on 26/10/2026 using the supplier safety data sheet dated 02/12/2024, version 2.0.0. Product identification and supplier details have been updated for PermaCOAT Liquid Epoxy DPM.

Phrases used in s.2 and s.3: Full text of hazard statements referenced in Sections 2 and 3:
H225: Highly flammable liquid and vapour.
H226: Flammable liquid and vapour.
H304: May be fatal if swallowed and enters airways.
H312: Harmful in contact with skin.
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.
H336: May cause drowsiness or dizziness.
H360D: May damage the unborn child.
H360F: May damage fertility.
H361d: Suspected of damaging the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure.
H410: Very toxic to aquatic life with long lasting effects.
H411: Toxic to aquatic life with long lasting effects.

Legal disclaimer: The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. 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 other process.