

Safety data sheet
complying with Regulation 1907/2006/EC (REACH Regulation),
EU 2015/830 and Regulation No 1272/2008/EC (CLP)

Printing date 30.10.2020

Version number 1

Revision: 30.10.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** EP 28 A**1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

Application of the substance / the mixture:

SOLVENT-FREE TWO COMPONENT EPOXY RESIN BASE COAT

1.3 Details of the supplier of the safety data sheet**Manufacturer/Supplier:**

PENETRON HELLAS S.A. G.E.MH. No: 07278001000

50, THRAKOMAKEDONON AV., 136 79 ACHARNES, GREECE

TEL.: +30 210 2448250 - FAX: + 30 210 2476803

Email: info@penetron.gr Site: www.penetron.gr

1.4 Emergency telephone number:

European Emergency Tel.: 112

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation EC No 1272/2008 CLP:**

GHS09 environment

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



GHS07

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.

2.2 Label elements**Labelling according to Regulation EC No 1272/2008 CLP:**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms:

GHS07 GHS09

Signal word: Warning**Hazard-determining components of labelling:**

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

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

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.

P280 Wear eye protection / face protection.

P302+P352 IF ON SKIN: Wash with plenty of water and soap.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Chemical characterisation: Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Ingredients according Regulation (EU) 830/2015:**

CAS: 1675-54-3	bis-[4-(2,3-epoxipropoxy)phenyl]propane	50-90%
EINECS: 216-823-5 Index number: 603-073-00-2	⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	10-25%
EINECS: 271-846-8 Index number: 603-103-00-4	⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	
CAS: 100-51-6	Benzyl alcohol	2.5-10%
EINECS: 202-859-9 Index number: 603-057-00-5	⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	

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:**

Take affected persons out into the fresh air.

Seek immediate medical advice.

In case of unconsciousness place patient stably in side position for transportation.

After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

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After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact:

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Check for and remove any contact lenses.

Continue to rinse for at least 15 minutes.

Get medical attention if irritation occurs.

Avoid strong water jet-risk of cornea damage, consult a doctor.

After swallowing: Seek immediate medical advice.**4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

Hazards May cause an allergic skin reaction.**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:**

Carbon dioxide, sand.

Water spray

Fight larger fires with water spray or water jet.

Alcohol resistant foam

5.2 Special hazards arising from the substance or mixture No further relevant information available.**5.3 Advice for firefighters****Protective equipment:**

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

Wear protective goggles.

Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.

6.1.1 For non-emergency personnel Avoid contact with dripping or leaking material**6.1.2 For emergency responders**

Wear protective equipment. Keep unprotected persons away.

First-aid responders must wear protective clothing, gloves, goggles and respiratory device with filter type A.

6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to penetrate the ground/soil.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

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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 contact with eyes, skin and clothing.

Ensure good ventilation/exhaustion at the workplace

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Store in cool, dry conditions in well sealed receptacles.

Requirements to be met by storerooms and receptacles:

Store in a cool location.

Prevent any seepage into the ground.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep container tightly sealed.

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:

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

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

8.2 Exposure controls

8.2.1. Appropriate engineering controls Provide adequate ventilation.

Personal protective equipment

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection:



In case of insufficient ventilation use suitable respiratory protective device.

Protection of hands:

Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.



Protective gloves

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

Butyl rubber

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Nitrile rubber, NBR

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 protection:

Tightly sealed goggles (EN 166).

Body protection:

Protective work clothing



Boots

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Form:	Liquid
Colour:	Clear
Odour:	Characteristic
Odour threshold:	Not determined

pH value: Not determined**Melting point/freezing point:** Not determined**Initial boiling point and boiling range:** Not determined

Flash point: >100 °C
 Ignition temperature: 435 °C

Flammability (solid, gas): Not applicable**Auto-ignition temperature:** Product does not self-ignite**Decomposition temperature:** Not determined**Auto-ignition temperature:** Product is not selfigniting.**Explosive properties:** Product does not present an explosion hazard.**Explosion limits:**

Lower:	Not applicable
Upper:	Not applicable

Oxidising properties Not oxidising

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Vapour pressure:	Not determined
Density at 20 °C:	1.13 g/cm ³ (DIN EN ISO 2811-2)
Relative density	Not determined
Vapour density	Not determined
Evaporation rate	Not determined
Solubility in / Miscibility with water:	Does not mix or it mix slightly
Partition coefficient: n-octanol/water:	Not determined
Viscosity:	
Dynamic at 20 °C:	700-900 mPas (DIN EN ISO 3219)
Kinematic:	Not determined
Solvent content:	
VOC (EC)	12.00 %
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity**10.1 Reactivity** No further relevant information.**10.2 Chemical stability****Thermal decomposition / conditions to be avoided** No decomposition if used according to specifications.**10.3 Possibility of hazardous reactions** Reacts with amines.**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials** No further relevant information available.**10.6 Hazardous decomposition products** No dangerous decomposition products known.**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity** Based on available data, the classification criteria are not met.**LD/LC50 values relevant for classification:**

CAS: 1675-54-3 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane

Oral LD50 >2,000 mg/kg (rat)

Dermal LD50 >2,000 mg/kg (rat)

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

Dermal LD50 26,800 mg/kg (rat)

CAS: 100-51-6 Benzyl alcohol

Oral LD50 1,230 mg/kg (rat)

Dermal LD50 2,000 mg/kg (rabbit)

Inhalative LC50/4h 11 mg/l (ATE)

LC50/4h >4,178 mg/m³ (rat)**Skin corrosion/irritation**

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

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Respiratory or skin sensitisation

May cause an allergic skin reaction.

Repeated dose toxicity Based on available data, the classification criteria are not met.**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)****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**Not classified as a risk for aspiration according to paragraphs 3.10.3.3.1.1. & 3.10.3.3.1.2 of CLP Regulation 1272/2008 / EC. The viscosity of the mixture at 40 ° C is greater than 20.5 mm² / s.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:**

CAS: 1675-54-3 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane

EC50/48 h 1,8 mg/l (Daphnia)

EC50/72h 9,4 mg/l (algae)

EC50/96 h 2 mg/l (Leuciscus idus)

NOEC / 21 Tage 0,3 mg/l (Daphnia)

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

EC50/48 h 6.08 mg/l (Daphnia)

LC50/96 h >5,000 mg/l (Leuciscus idus)

CAS: 100-51-6 Benzyl alcohol

EC50/72h 770 mg/l (algae)

12.2 Persistence and degradability No further relevant information available.**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**Ecotoxicological effects:****Remark:** Toxic for fish**Additional ecological information:****General notes:**

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.

12.5 Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects** No further relevant information available.

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SECTION 13: Disposal considerations**13.1 Waste treatment methods****Recommendation**

Dispose according to National Regulations.



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

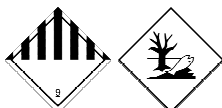
Contact manufacturer for recycling information.

Waste disposal key:

08 04 09* waste adhesives and sealants containing organic solvents or other hazardous substances

Uncleaned packaging:**Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN-Number****ADR, IMDG, IATA**

UN3082

14.2 UN proper shipping name**ADR**3082 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-methylethylidene)
bis(4,1-phenyleneoxymethylene)]bisoxirane)**IMDG**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-
phenyleneoxymethylene)]bisoxirane), MARINE
POLLUTANT**IATA**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S. (2,2'-[(1-methylethylidene)bis(4,1-
phenyleneoxymethylene)]bisoxirane)**14.3 Transport hazard class(es)****ADR, IMDG, IATA****Class**

9 Miscellaneous dangerous substances and articles.

Label

9

14.4 Packing group**ADR, IMDG, IATA**

III

14.5 Environmental hazards:**Marine pollutant:**

Environmental Hazardous

Yes

Symbol (fish and tree)

Symbol (fish and tree)

Symbol (fish and tree)

Special marking (ADR):**Special marking (IATA):****14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

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Hazard identification number (Kemler code): 90
EMS Number: F-A,S-F
Stowage Category A
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

Transport/Additional information:

ADR
Limited quantities (LQ) 5L
Excepted quantities (EQ) Code: E1
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 1000 ml
Transport category 3
Tunnel restriction code -

IMDG
Limited quantities (LQ) 5L
Excepted quantities (EQ) Code: E1
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 1000 ml
UN "Model Regulation": UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,2'-[(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXYMETHYLENE)]BISOXIRANE), 9, III

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

REACH Regulation 1907/2006/EC

Regulation (EU) 2015/830

CLP Regulation 1272/2008/EC

Directive 98/24/EC on the protection of health and safety of workers from the risks related to chemicals agents at work.

Council Directive 94/33/EC on the protection of young people at work, as ammended.

Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding, as ammended

Directive 2012/18/EU**Named dangerous substances - ANNEX I** None of the ingredients is listed.**Seveso category** E2 Hazardous to the Aquatic Environment**Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t**Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3**DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

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National regulations:**Information about limitation of use:**

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

Other regulations, limitations and prohibitive regulations**Substances of very high concern (SVHC) according to REACH, Article 57**

It doesn't contain substances of very high concern (SVHC).

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.

Relevant phrases

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H411 Toxic to aquatic life with long lasting effects.

Training hints

Suitable training on safety in handling, storing and converting the product should be given to the employees based on all the existing information.

Department issuing SDS:

SUSTCHEM S.A.

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Abbreviations and acronyms:

ADR: Accord européen sur le transport 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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity - oral – Category 4

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

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