

Printing date 13.09.2018

ENETRON

Version number 1

Revision: 11.09.2018

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

1.1 Product identifier

Trade name: EP 55 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: Epoxy coating

Epoxy resin

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:



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



Skin Irrit. 2H315 Causes skin irritation.Eye Irrit. 2H319 Causes serious eye irritation.Skin Sens. 1H317 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:



Signal word: Warning

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Hazard-deteri	nining componer	ts of labelling:	
		pichlorhydrin) epoxy resin (number average	molecular weight ≤ 700)
	(C12-14-alkyloxy		
Hazard staten	ents:		
H315 Causes s	kin irritation.		
H319 Causes s	erious eye irritatio	n.	
	se an allergic skin		
H411 Toxic to	aquatic life with l	ong lasting effects.	
Precautionary	statements		
P273		to the environment.	
P280	Wear protectiv	ve gloves/protective clothing/eye protection/	face protection.
P302+P352	IF ON SKIN:	Wash with plenty of water.	-
P305+P351+P3	338 IF IN EYES: I	Rinse cautiously with water for several minu	tes. Remove contact lenses, if
	present and ea	sy to do. Continue rinsing.	
P501	Dispose of con	ntents/container in accordance with local/reg	gional/national/international
	regulations.		
2.3 Other haza			
	Γ and vPvB asses	sment	
	icable.		
PBT: Not appl vPvB: Not app			

Description: Mixture: consisting of the following components

Description: Mixture: consisting of the following components.				
Ingredients according Regulation (EU) 830/2015:				
CAS: 25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin			
NLP: 500-033-5	(number average molecular weight ≤ 700)			
Index number: 603-074-00-8	Aquatic Chronic 2, H411; (1) Skin Irrit. 2, H315; Eye Irrit.			
Reg.nr.: 01-2119456619-26-XXXX	2, H319; Skin Sens. 1, H317			
CAS: 68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs			
EINECS: 271-846-8	() Skin Irrit. 2, H315; Skin Sens. 1, H317			
Index number: 603-103-00-4				

SECTION 4: First aid measures

Reg.nr.: 01-2119485289-22-0000

4.1 Description of first aid measures

General information: Seek immediate medical advice.

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.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Remove contact lenses and continue rinsing for several minutes

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

50-100%

10-20%

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After swallowing:

Drink plenty of water and provide fresh air. Call for a doctor immediately. Seek immediate medical advice.

Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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.

Use fire extinguishing methods suitable to surrounding conditions.

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.

Additional information

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:

Wear protective equipment. Keep unprotected persons away.

Avoid contact with skin and eyes.

Avoid inhalation of dust.

Ensure adequate ventilation.

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

6.1.2 For emergency responders

First-aid responders must wear protectice clothing, gloves, goggles and respiratory device.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Use neutralising agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Send for recovery or disposal in suitable receptacles.

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

No special measures required.

Open and handle receptacle with care.

Prevent formation of dust.

Avoid contact with skin, eyes and clothing.

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

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

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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.

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

Further information about storage conditions:

Keep container tightly sealed.

Store under lock and key and with access restricted to technical experts or their assistants only.

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.

8.2 Exposure controls

8.2.1. Appropriate engineering controls

Take appropriate protective measures with regard to the handling of chemicals and mixtures.

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:



Use suitable respiratory protective device in case of insufficient ventilation.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation **Material of gloves**

Butyl rubber, BR - 0,7 mm

Nitrile rubber, NBR- 0,4 mm

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 mixture 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.

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The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended. **Eye protection:**



Tightly sealed goggles

Body protection:



Protective work clothing

Environmental exposure controls: Prevent enter of the product into drains, surface and groundwater and soil.

SECTION 9: Physical and chemical properties					
9.1 Information on basic physical an General Information					
Appearance: Form: Colour: Odour: Odour threshold:	Liquid Colourless Characteristic Not determined				
pH value:	Not determined				
Flash point:	>100 °C				
Flammability (solid, gas):	Not applicable				
Auto-ignition temperature:	455 °C				
Decomposition temperature:	Not determined				
Auto-ignition temperature:	Product is not selfigniting.				
Explosive properties:	Product does not present an explosion hazard.				
Explosion limits: Lower: Upper:	Not determined Not determined				
Vapour pressure at 20 °C:	0.1 hPa				
Density at 20 °C: Relative density Vapour density Evaporation rate	1.12 g/cm ³ (DIN EN ISO 2811-2) Not determined Not determined Not determined				
Solubility in / Miscibility with water:	Not miscible	(Contd. on page 6)			

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Partition coefficient: n-octanol/water: Not determined

Viscosity: Dynamic at 20 °C: Kinematic: 9.2 Other information

972 mPas (DIN EN ISO 3219) Not determined No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity Stable under normal conditions
10.2 Chemical stability Material is stable under normal conditions.
Thermal decomposition / conditions to be avoided Stable at environment temperature.
10.3 Possibility of hazardous reactions
Exothermic polymerisation
Reacts with alcohols.
Reacts with amines.
Reacts with alkali (lyes).
Reacts with strong acids.
10.4 Conditions to avoid No further relevant information available.
10.5 Incompatible materials No further relevant information available.
10.6 Hazardous decomposition products Corrosive gases/vapours

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:
25068-38-6: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight < 700)
Oral LD50 >5000 mg/kg (rat)
Dermal LD50 >2000 mg/kg (rabbit)

68609-97-2: oxirane, mono[(C12-14-alkyloxy)methyl] derivs
Dermal LD50 26800 mg/kg (rat)
Skin corrosion/irritation
Causes skin irritation.
Serious eye damage/irritation
Causes serious eye irritation.
Respiratory or skin sensitisation
May cause an allergic skin reaction.
Repeated dose toxicity Based on the data, the classification criteria are not fulfilled.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity 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.

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Aspiration hazard

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Not classified as a risk for aspiration according to paragraphs 3.10.3.3.1.1. & Amp; 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:

25068-38-6: reaction product - bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight < 700)

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

EC50/96 h 220 mg/l (Grünalge (Desmodesmus subspicatus))

LC50/96 h 2 mg/l (Leuciscus idus (Goldorfe))

68609-97-2: oxirane, mono[(C12-14-alkyloxy)methyl] derivs EC50/48 h 6.08 mg/l (Daphnia (Wasserfloh))

LC50/96 h > 5000 mg/l (Leuciscus idus (Goldorfe))

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.

Ecotoxical effects:

Remark: Toxic for fish

Additional ecological information:

General notes:

Also poisonous for fish and plankton in water bodies.

The product contains materials that are harmful to the environment.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects No further relevant information available.

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 dangerous substances.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

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Printing date 13.09.2018 Version number 1 Revision: 11.09.2018 Trade name: EP 55 A (Contd. of page 7) **SECTION 14: Transport information** 14.1 UN-Number ADR, IMDG, IATA **UN3082** 14.2 UN proper shipping name 3082 ENVIRONMENTALLY HAZARDOUS ADR SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)) IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE. IATA LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)) 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 Ш 14.5 Environmental hazards: **Environmental Hazardous** Product contains environmentally hazardous substances: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight < 700) Marine pollutant: Yes Symbol (fish and tree) Special marking (ADR): Symbol (fish and tree) Special marking (IATA): Symbol (fish and tree) 14.6 Special precautions for user Warning: Miscellaneous dangerous substances and articles. Danger code (Kemler): 90 **EMS Number:** F-A.S-F **Stowage Category** А 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. **Transport/Additional information:** ADR Limited quantities (LO) 5L **Excepted quantities (EQ)** Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

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Transport category	3	(Contd. of page 8
IMDG		
Limited quantities (LQ)	5L	
Excepted quantities (EQ)	Code: E1	
	Maximum net quantity pe	er inner packaging: 30 ml
	Maximum net quantity pe	er outer packaging: 1000 ml
UN "Model Regulation":	UN 3082 ENVÎRONMÊ	NTALLY HAZARDOUS
C	SUBSTANCE, LIQUID,	N.O.S. (REACTION PRODUCT:
	BISPHENOL-A-(EPICH	LORHYDRIN) EPOXY RESIN
	(NUMBER AVERAGE I	MOLECULAR WEIGHT \leq 700))
	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 Substance is not 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

National regulations:

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**

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

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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:



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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) 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 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