

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

Printing date 26.07.2018

Version number 1

Revision: 26.07.2018

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name:** EP 861 Component B**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

Hardening agent/ Curing agent

**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:**

GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

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

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

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**Hazard pictograms:**

GHS02 GHS05 GHS07

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

butan-1-ol  
 xylene

**Hazard statements:**

H226 Flammable liquid and vapour.  
 H315 Causes skin irritation.  
 H318 Causes serious eye damage.  
 H336 May cause drowsiness or dizziness.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**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: consisting of the following components.**Ingredients according Regulation (EU) 830/2015:**

CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32-XXXX	xylene 	10-25%
CAS: 107-98-2 EINECS: 203-539-1 Index number: 603-064-00-3	1-methoxy-2-propanol 	10-25%
CAS: 71-36-3 EINECS: 200-751-6 Index number: 603-004-00-6 Reg.nr.: 01-2119484630-38-XXXX	butan-1-ol 	2.5-10%

**Additional information:** For the wording of the hazard statements, see section 16.

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#### 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.

###### After inhalation:

Remove the victim into fresh air.  
 In case of unconsciousness place patient stably in side position for transportation.  
 Seek medical treatment in case of complaints.

###### After skin contact:

Immediately wash with water and soap and rinse thoroughly.  
 If skin irritation continues, consult a doctor.  
 In case of skin irritation, consult a physician.

###### 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.

**After swallowing:** Consult a physician or poison control center.

##### 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:** CO<sub>2</sub>, powder or water spray. Fight larger fire with foam.

**5.2 Special hazards arising from the substance or mixture** No further relevant information available.

##### 5.3 Advice for firefighters

###### Protective equipment:

During fire-fighting wear suitable respiratory device (SCBA) with a full face-piece operated in positive pressure mode.

###### 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.

###### 6.1.2 For emergency responders

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

##### 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.  
 Do not allow to penetrate the ground/soil.  
 Inform respective authorities in case of seepage into water course or sewage system.

##### 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material: (sand, diatomite, acid binders, universal binders and sawdust).  
 Dispose contaminated material as waste according to item 13.

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**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.

Do not breathe vapor or mist.

Take protective measures against electrostatic discharge.

Avoid contact with eyes, hands and clothing.

**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:** Prevent any seepage into the ground.**Information about storage in one common storage facility:**

Store away from oxidizing agents.

Store away from foodstuffs and feed products

Store away from amines.

**Further information about storage conditions:**

Keep container tightly sealed.

Protect from heat and direct sunlight.

**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: 1330-20-7 xylene**

WEL (Great Britain)	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV
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IOELV (EU)	Short-term value: 442 mg/m <sup>3</sup> , 100 ppm Long-term value: 221 mg/m <sup>3</sup> , 50 ppm Skin
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**CAS: 107-98-2 1-methoxy-2-propanol**

WEL (Great Britain)	Short-term value: 560 mg/m <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm Sk
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IOELV (EU)	Short-term value: 568 mg/m <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm Skin
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**CAS: 71-36-3 butan-1-ol**

WEL (Great Britain)	Short-term value: 154 mg/m <sup>3</sup> , 50 ppm Sk
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**Ingredients with biological limit values:****CAS: 1330-20-7 xylene**

BMGV (Great Britain)	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid
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**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.

Avoid contact with the eyes and skin.

Be sure to clean skin thoroughly after work and before breaks.

Remove contaminated clothing and protective equipment before entering eating areas.

Do not eat, drink or smoke while using the product.

Do not inhale dust / smoke / mist.

**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

Neoprene

Viton

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 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

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**Body protection:**

Protective work clothing

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

<b>Form:</b>	Liquid
<b>Colour:</b>	Yellowish
<b>Odour:</b>	Solvent
<b>Odour threshold:</b>	Not determined

**pH value:** Not determined**Initial boiling point and boiling range:** 120 °C**Flash point:** 26 °C**Flammability (solid, gas):** Not applicable**Auto-ignition temperature:** 340 °C**Decomposition temperature:** Not determined**Auto-ignition temperature:** Product is not selfigniting.**Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.**Explosion limits:**

<b>Lower:</b>	1.5 Vol %
<b>Upper:</b>	10.9 Vol %

**Vapour pressure at 20 °C:** 12 hPa**Density at 20 °C:** 1.03 g/cm<sup>3</sup> (DIN EN ISO 2811-2)**Relative density** Not determined**Vapour density** Not determined**Evaporation rate** Not determined**Solubility in / Miscibility with water:**

Not miscible

**Partition coefficient: n-octanol/water:** Not determined**Viscosity:****Dynamic at 20 °C:** 3,400 mPas (DIN EN ISO 3219)**Kinematic:** Not determined

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**9.2 Other information**

No further relevant information available.

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**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**

Reacts with acids, alkalis and oxidising agents.

Reacts with amines.

Reacts with alcohols.

Exothermic reaction.

**10.4 Conditions to avoid** No further relevant information available.**10.5 Incompatible materials** No further relevant information available.**10.6 Hazardous decomposition products** Irritant 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:****ATE (Acute Toxicity Estimates)**

Oral	LD50	7,900-31,600 mg/kg (rat)
Dermal	LD50	6,800-17,000 mg/kg (rabbit)
Inhalative	LC50-4h	44-110 ppm

**CAS: 1330-20-7 xylene**

Oral	LD50	4,300 mg/kg (rat)
Dermal	LD50	1,700 mg/kg (rabbit)
Inhalative	LC50-4h	5,000 ppm (rat)

**CAS: 107-98-2 1-methoxy-2-propanol**

Oral	LD50	4,016 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

**CAS: 71-36-3 butan-1-ol**

Oral	LD50	790 mg/kg (rat)
Inhalative	LC50-4h	800 ppm (rat)

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye damage.

**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.**Repeated dose toxicity** Based on the data, the classification criteria are not fulfilled.**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.

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**STOT-single exposure**

The product is classified as Specific Target Organ Toxicity after single exposure Category 3

May cause drowsiness or dizziness.

**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. &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 mm<sup>2</sup> / s.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:****CAS: 1330-20-7 xylene**

EC50-48h &gt;7.4 mg/l (daphnia magna)

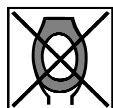
**CAS: 107-98-2 1-methoxy-2-propanol**

EC50-48h 23300 mg/l (daphnia magna)

LC50-96h &gt; 4600 mg/l (Leuciscus Idus)

**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.**Additional ecological information:****General notes:** Must not reach sewage water or drainage ditch undiluted or unneutralised.**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.

Packaging may be reused or recycled after cleaning.

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**SECTION 14: Transport information**

<b>14.1 UN-Number</b>	
<b>ADR, IMDG, IATA</b>	UN1866
<b>14.2 UN proper shipping name</b>	
<b>ADR</b>	1866 RESIN SOLUTION
<b>IMDG, IATA</b>	RESIN SOLUTION
<b>14.3 Transport hazard class(es)</b>	
<b>ADR, IMDG, IATA</b>	
	
<b>Class</b>	3 Flammable liquids.
<b>Label</b>	3
<b>14.4 Packing group</b>	
<b>ADR, IMDG, IATA</b>	III
<b>14.5 Environmental hazards:</b>	Not applicable.
<b>14.6 Special precautions for user</b>	Warning: Flammable liquids.
<b>Danger code (Kemler):</b>	30
<b>EMS Number:</b>	F-E, <u>S</u> -E
<b>Stowage Category</b>	B
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.

**Transport/Additional information:**

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

<b>IMDG</b>	
<b>Limited quantities (LQ)</b>	5L
<b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
<b>UN "Model Regulation":</b>	UN 1866 RESIN SOLUTION, 3, 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.

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

**Directive 2012/18/EU****Named dangerous substances - ANNEX I**

None of the ingredients is listed.

Substance is not listed.

**Seveso category** P5c FLAMMABLE LIQUIDS**Qualifying quantity (tonnes) for the application of lower-tier requirements** 5,000 t**Qualifying quantity (tonnes) for the application of upper-tier requirements** 50,000 t**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 40**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**

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

**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 Engineering SA  
 REACH & Chemical Services Department  
 144, 3rd Septemvriou, GR 112 51, Athens, Greece  
 Tel.: +30 210 8252510 Fax: +30 210 8252575  
 E-mail: info@suschem.gr  
 Website: www.sustchem.gr

**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

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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

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

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

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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

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