

**Safety data sheet**  
**complying with Regulation 1907/2006/EC (REACH Regulation),**  
**EU 2020/878 and Regulation No 1272/2008/EC (CLP)**

Printing date 21.07.2021

Version number 5 (replaces version 4)

Revision: 21.07.2021

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

**1.1 Product identifier**

**Trade name:** PENECOAT™ PU-H

**UFI:** UG70-90CY-R005-DPHX

**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:** Aliphatic polyurethane semi-rigid protective top-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:**



GHS02 flame

Flam. Liq. 3      H226 Flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1      H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

STOT RE 2      H373 May cause damage to organs through prolonged or repeated exposure.

Asp. Tox. 1      H304 May be fatal if swallowed and enters airways.



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.

STOT SE 3      H335 May cause respiratory irritation.

Aquatic Chronic 3      H412 Harmful to aquatic life with long lasting effects.

**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 GHS07 GHS08

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

Reaction mass of ethylbenzene and m-xylene and p-xylene  
 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers  
 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate  
 1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate  
 maleic anhydride  
 4,5-dichloro-2-octyl-2H-isothiazol-3-one  
 Addition reaction products of conjugated sunflower-oil fatty acids and tall-oil fatty acids with maleic anhydride

**Hazard statements:**

H226 Flammable liquid and vapour.  
 H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H317 May cause an allergic skin reaction.  
 H335 May cause respiratory irritation.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H304 May be fatal if swallowed and enters airways.  
 H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P102 Keep out of reach of children.  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P331 Do NOT induce vomiting.  
 P302+P352 IF ON SKIN: Wash with plenty of water and soap.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Additional information:**

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

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**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.\* **SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:** Mixture: consisting of the following components.**Ingredients according Regulation (EU) 2020/878:**

EC number: 905-562-9 Reg.nr.: 01-2119488216-32-XXXX	Reaction mass of ethylbenzene and m-xylene and p-xylene ⚠ Flam. Liq. 3, H226; ⚠ STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 3, H412	≥25-<35%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-2119475791-29-XXXX	2-methoxy-1-methylethyl acetate ⚠ Flam. Liq. 3, H226	≥3-<5%
CAS: 53880-05-0 NLP: 500-125-5 Reg.nr.: 01-2119488734-24-XXXX	3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers ⚠ Skin Sens. 1B, H317; STOT SE 3, H335	≥3-<5%
CAS: 140921-24-0 ELINCS: 411-700-4 Index number: 616-079-00-5 Reg.nr.: 01-0000015906-63-XXXX	1,6-hexanediyl-bis(2-(2-(1-ethylpentyl)-3-oxazolidinyl)ethyl)carbamate ⚠ Skin Sens. 1, H317	≥3-<5%
CAS: 4098-71-9 EINECS: 223-861-6 Index number: 615-008-00-5	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate ⚠ Acute Tox. 3, H331; ⚠ Resp. Sens. 1, H334; ⚠ Aquatic Chronic 2, H411; ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Resp. Sens. 1; H334: C ≥ 0.5 % Skin Sens. 1; H317: C ≥ 0.5 %	≥0.5-<1%
EC number: 701-043-4 Reg.nr.: 01-2119976378-19-XXXX	Addition reaction products of conjugated sunflower-oil fatty acids and tall-oil fatty acids with maleic anhydride ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	≥0.1-<1%
CAS: 108-31-6 EINECS: 203-571-6 Index number: 607-096-00-9 Reg.nr.: 01-2119472428-31-XXXX	maleic anhydride ⚠ Resp. Sens. 1, H334; STOT RE 1, H372; ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317 Specific concentration limit: Skin Sens. 1A; H317: C ≥ 0.001 %	≥0.001-<0.1%

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CAS: 64359-81-5 EINECS: 264-843-8 Index number: 613-335-00-8	4,5-dichloro-2-octyl-2H-isothiazol-3-one ☠ Acute Tox. 2, H330; ☠ Skin Corr. 1, H314; Eye Dam. 1, H318; ☠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100); ☠ Acute Tox. 4, H302; Skin Sens. 1A, H317 Specific concentration limits: Skin Irrit. 2; H315: C ≥ 0.025 % Eye Irrit. 2; H319: C ≥ 0.025 % Skin Sens. 1A; H317: C ≥ 0.0015 %	≥0.0015-<0.0025%
CAS: 13463-67-7 EINECS: 236-675-5 Index number: 022-006-00-2 Reg.nr.: 01-2119489379-17-XXXX	titanium dioxide substance with a Community workplace exposure limit	≥15-<20%

**Additional information:**

(CAS:13463-67-7) Titanium dioxide

Note 10: The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.

**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:**

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

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.

**After eye contact:**

Rinse opened eye for at least 15 minutes under running water.

Seek immediate medical advice.

**After swallowing:**

Do not induce vomiting; call for medical help immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

Seek immediate medical advice.

**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 fires with water spray.**For safety reasons unsuitable extinguishing agents:** Water with full jet

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**5.2 Special hazards arising from the substance or mixture**

Carbon monoxide (CO)

Carbon dioxide (CO<sub>2</sub>)**5.3 Advice for firefighters****Protective equipment:**

Mouth respiratory protective device.

Wear fully protective suit.

**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.

Keep away from ignition sources.

Avoid inhalation of vapors.

Wear protective clothing.

**6.2 Environmental precautions:**

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

Do not allow to penetrate the ground/soil.

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

Collect with absorbent material (sand, diatomite).

Ensure adequate ventilation.

**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/exhaustion at the workplace.

Open and handle receptacle with care.

Avoid contact with skin, eyes and clothing.

Avoid inhaling vapors.

**Information about fire - and explosion protection:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

**7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:**

Store away from sources of ignition

Store in a cool location.

Prevent any seepage into the ground.

Provide ventilation for receptacles.

**Further information about storage conditions:**

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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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: 13463-67-7 titanium dioxide**

WEL (Great Britain)	Long-term value: 10* 4** mg/m <sup>3</sup> *total inhalable **respirable
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**CAS: 108-65-6 2-methoxy-1-methylethyl acetate**

WEL (Great Britain)	Short-term value: 548 mg/m <sup>3</sup> , 100 ppm Long-term value: 274 mg/m <sup>3</sup> , 50 ppm Sk
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IOELV (EU)	Short-term value: 550 mg/m <sup>3</sup> , 100 ppm Long-term value: 275 mg/m <sup>3</sup> , 50 ppm Skin
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**CAS: 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate**

WEL (Great Britain)	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO
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**CAS: 108-31-6 maleic anhydride**

WEL (Great Britain)	Short-term value: 3 mg/m <sup>3</sup> Long-term value: 1 mg/m <sup>3</sup> Sen
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**DNELs**

ETHYLBENZOLE REACTION MIXTURE, m-Xylol and p-Xylol.

DNEL Workers:

Inhalation - Intensive systemic effect = 289 mg / m<sup>3</sup>Inhalation - Chronic systemic effect = 77 mg / m<sup>3</sup>

Skin - Chronic systemic effect = 180 mg / kg

DNEL Consumers:

Mouth - Chronic systemic effect = 1.6 mg / kg

Inhalation - Intensive systemic effect = 174 mg / m<sup>3</sup>Inhalation - Chronic systemic effect = 14.8 mg / m<sup>3</sup>

Skin - Chronic systemic effect = 108 mg / kg

Titanium dioxide cas: 13463-67-7

DNEL: 10 mg/m<sup>3</sup>**PNECs**

ETHYLBENZOLE REACTION MIXTURE, m-Xylol and p-Xylol.

PNEC:

in fresh water 0.327 mg / l

in marine water 0,327 mg / l

for sediment in fresh water 12,46 mg / kg

for sediment in marinewater 12,46 mg / kg

for water, intermittent release of 0.327 mg / l

for STP 6.58 mg / l microorganisms

for the terrestrial area of 2,31 mg / kg

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**Ingredients with biological limit values:****CAS: 4098-71-9 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate**

BMGV (Great Britain)	1 µmol creatinine/mol Medium: urine Sampling time: At the end of the period of exposure Parameter: isocyanate-derived diamine
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**8.2 Exposure controls****Individual protection measures, such as personal protective equipment****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

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

The usual precautionary measures are to be adhered to when handling chemicals.

Ensure adequate ventilation during use.

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

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. Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of charcoal filter and particulate filter A2-P2 (EN529) is recommended.

**Hand protection**

Protective gloves resistant to chemicals (standard EN 374-1)

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

**Material of gloves**

Hand protection when handling the product at room temperature:

Butyl rubber - IIR: thickness ≥0,5mm; breakthrough time ≥480min.

Fluorinated rubber - FKM: thickness ≥0,4mm; breakthrough time ≥480min.

Recommendation: contaminated gloves should be disposed of.

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 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

**Eye/face protection**

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

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**Body protection:**

Chemically resistant, protective work clothing (EN 14605) and boots.

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

<b>Physical state</b>	Viscous liquid
<b>Colour:</b>	Various colours
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined
<b>Melting point/freezing point:</b>	Not determined
<b>Boiling point or initial boiling point and boiling range</b>	Not determined
<b>Flammability</b>	Not applicable
<b>Lower and upper explosion limit</b>	
<b>Lower:</b>	0.7 Vol %
<b>Upper:</b>	7.5 Vol %
<b>Flash point:</b>	35 °C
<b>Auto-ignition temperature:</b>	Product is not selfigniting.
<b>Decomposition temperature:</b>	Not determined
<b>pH</b>	Not determined
<b>Viscosity:</b>	
<b>Kinematic viscosity</b>	Not determined
<b>Kinematic viscosity</b>	
<b>Dynamic at 20 °C:</b>	>40 mPas
<b>Solubility</b>	
<b>water:</b>	Not miscible
<b>Partition coefficient n-octanol/water (log value)</b>	Not determined
<b>Vapour pressure:</b>	Not determined
<b>Density and/or relative density</b>	
<b>Density at 20 °C:</b>	1.15 g/cm <sup>3</sup>
<b>Relative density</b>	Not determined
<b>Vapour density</b>	Not determined

**9.2 Other information****Appearance:****Form:** Liquid**Important information on protection of health and environment, and on safety.**

<b>Auto-ignition temperature:</b>	488 °C
<b>Explosive properties:</b>	Not determined.
<b>Solvent content:</b>	
<b>VOC (EC)</b>	450 g/l
<b>Cloud point / clarification point:</b>	
<b>Oxidising properties</b>	Not considered as oxidising.
<b>Evaporation rate</b>	Not determined

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**Information with regard to physical hazard classes**

<b>Explosives</b>	Void
<b>Flammable gases</b>	Void
<b>Aerosols</b>	Void
<b>Oxidising gases</b>	Void
<b>Gases under pressure</b>	Void
<b>Flammable liquids</b>	
Flammable liquid and vapour.	
<b>Flammable solids</b>	Void
<b>Self-reactive substances and mixtures</b>	Void
<b>Pyrophoric liquids</b>	Void
<b>Pyrophoric solids</b>	Void
<b>Self-heating substances and mixtures</b>	Void
<b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
<b>Oxidising liquids</b>	Void
<b>Oxidising solids</b>	Void
<b>Organic peroxides</b>	Void
<b>Corrosive to metals</b>	Void
<b>Desensitised explosives</b>	Void

**SECTION 10: Stability and reactivity****10.1 Reactivity** No further relevant information available.**10.2 Chemical stability****Thermal decomposition / conditions to be avoided** Stable at environment temperature.**10.3 Possibility of hazardous reactions** No dangerous reactions known.**10.4 Conditions to avoid** Avoid heat, sparkles, naked flame or other sources of ignition.**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 hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity** Based on available data, the classification criteria are not met.**LD/LC50 values relevant for classification:**

Dermal	ATEmix	3,952 mg/kg
Inhalative	ATEmix (vapours)	34.6 mg/l
	ATEmix	3.26 mg/l

**Reaction mass of ethylbenzene and m-xylene and p-xylene**

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

**CAS: 108-65-6 2-methoxy-1-methylethyl acetate**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rat)

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Inhalative	LC50 (4h)	1,805.05 ppm (rat)
<b>CAS: 108-31-6 maleic anhydride</b>		
Oral	LD50	400 mg/kg (rat)
Dermal	LD50	2,620 mg/kg (rabbit)
<b>CAS: 64359-81-5 4,5-dichloro-2-octyl-2H-isothiazol-3-one</b>		
Oral	LD50	567 mg/kg (ATE)
Inhalative	LC50/4h (dusts and mists)	0.16 mg/l

**Skin corrosion/irritation** Causes skin irritation.**Serious eye damage/irritation** Causes serious eye irritation.**Respiratory or skin sensitisation**

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

**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**

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

May cause respiratory irritation.

**STOT-repeated exposure**

STOT Repeated Exposure Category 2

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

The product is classified Aspiration toxicity Category 1

May be fatal if swallowed and enters airways.

**Additional toxicological information:****Sensitisation** Sensitization possible through skin contact**11.2 Information on other hazards****Endocrine disrupting properties**

None of the ingredients is listed.

\*

**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:****CAS: 108-65-6 2-methoxy-1-methylethyl acetate**

EC50 (48h) 8.8 mg/l (crustacean)

LC50 (96h) 6.83 mg/l (fis)

**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.**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.**12.7 Other adverse effects****Remark:** Harmful to fish

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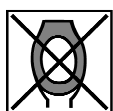
**Additional ecological information:****General notes:**

The product contains materials that are harmful to the environment.  
 Harmful to aquatic organisms

\*

**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.

**Uncleaned packaging:****Recommendation:**

Disposal must be made according to official regulations.  
 Packaging may be reused or recycled after cleaning.

\*

**SECTION 14: Transport information****14.1 UN number or ID number**

ADR, IMDG, IATA

UN1866

**14.2 UN proper shipping name**

ADR

1866 RESIN SOLUTION

IMDG, IATA

RESIN SOLUTION

**14.3 Transport hazard class(es)**

ADR, IMDG, IATA



Class

3 Flammable liquids.

Label

3

**14.4 Packing group**

ADR, IMDG, IATA

III

**14.5 Environmental hazards:**

Marine pollutant:

No

**14.6 Special precautions for user**

Warning: Flammable liquids.

Hazard identification number (Kemler code):

30

EMS Number:

F-E,S-E

Stowage Category

A

**14.7 Maritime transport in bulk according to IMO**  
 instruments

Not applicable.

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**Transport/Additional information:****ADR****Limited quantities (LQ)****Excepted quantities (EQ)**

5L

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

**Transport category****Tunnel restriction code**

3

D/E

**IMDG****Limited quantities (LQ)****Excepted quantities (EQ)**

5L

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

**UN "Model Regulation":**

UN 1866 RESIN SOLUTION, 3, III

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

Directive 94/62/EC on packaging and packaging waste.

REACH Regulation 1907/2006/EC

Regulation (EU) 2020/878

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 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** 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, 74**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.

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**Safety data sheet**  
**complying with Regulation 1907/2006/EC (REACH Regulation),**  
**EU 2020/878 and Regulation No 1272/2008/EC (CLP)**

Printing date 21.07.2021

Version number 5 (replaces version 4)

Revision: 21.07.2021

**Trade name:** PENECOAT™ PU-H

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H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H330 Fatal if inhaled.  
H331 Toxic if inhaled.  
H332 Harmful if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335 May cause respiratory irritation.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.  
EUH204 Contains isocyanates. May produce an allergic reaction.

**Department issuing SDS:**

SUSTCHEM S.A.  
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**Version number of previous version: 4****Abbreviations and acronyms:**

ADR: Accord relatif au transport international 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)  
DNEL: Derived No-Effect Level (REACH)  
PNEC: Predicted No-Effect Concentration (REACH)  
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  
Acute Tox. 2: Acute toxicity – Category 2  
Acute Tox. 3: Acute toxicity – Category 3  
Skin Corr. 1: Skin corrosion/irritation – Category 1  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
Resp. Sens. 1: Respiratory sensitisation – Category 1

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Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Skin Sens. 1B: Skin sensitisation – Category 1B

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

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

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

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

**\* Data compared to the previous version altered.**

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