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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

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

1.1 Product identifier

Trade name: PENEPRIMER™ PU
UFI: 35C0-2021-W00F-UCKQ

1.2 Relevant identified uses of the substance or mixture and uses advised against Professional use
Application of the substance / the mixture: Polyurethane primer

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
PENETRON HELLAS S.A.
50, THRAKOMAKEDONON AV., 136 79 ACHARNES, GREECE
TEL.: +30 210 2448250 - FAX: + 30 210 2476803
Email: info@penetron.gr Site: www.penetron.gr
G.E.MI. No: 07278001000

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.
Carc. 2	H351 Suspected of causing cancer.
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.

(Contd. on page 2)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 1)

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:



GHS02 GHS07 GHS08

Signal word: Danger

Hazard-determining components of labelling:
Reaction mass of ethylbenzene and m-xylene and p-xylene
diphenylmethane diisocyanate,isomeres and homologues
m-tolylidene diisocyanate
4-isocyanatosulphonyltoluene tosyl isocyanate

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.
H351 Suspected of causing cancer.
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.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.
P331	Do NOT induce vomiting.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:
EUH204 Contains isocyanates. May produce an allergic reaction.
As from 24 August 2023 adequate training is required before industrial or professional use.

(Contd. on page 3)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 2)

2.3 Other hazards
Results of PBT and vPvB assessment
The product does not contain ingredients that are considered either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
PBT: Not applicable
vPvB: Not applicable
Determination of endocrine-disrupting properties
The product does not contain substances included in the list established in accordance with Article 59(1) of REACH for endocrine disrupting properties or has not been identified as having endocrine disrupting properties according to the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or higher than 0.1%.

*
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 Specific concentration limit: STOT RE 2; H373: C ≥ 10 %	>30-<35%
CAS: 9016-87-9 EC number: 618-498-9	diphenylmethane diisocyanate,isomeres and homologues Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335, EUH204 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % Resp. Sens. 1; H334: C ≥ 0.1 % STOT SE 3; H335: C ≥ 5 % substance with a Community workplace exposure limit	>15-<17%
CAS: 141-78-6 EINECS: 205-500-4 Index number: 607-022-00-5 Reg.nr.: 01-2119475103-46-XXXX	ethyl acetate Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066 substance with a Community workplace exposure limit	>10-<15%

(Contd. on page 4)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 3)

CAS: 4083-64-1 EINECS: 223-810-8 Index number: 615-012-00-7 Reg.nr.: 01-2119980050-47-XXXX	4-isocyanatosulphonyltoluene tosyl isocyanate Resp. Sens. 1, H334; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335, EUH014 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % STOT SE 3; H335: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 % substance with a Community workplace exposure limit	>0.1-<0.5%
CAS: 26471-62-5 EINECS: 247-722-4 Index number: 615-006-00-4 Reg.nr.: 01-2119454791-34-XXXX	m-tolylidene diisocyanate Acute Tox. 2, H330; Resp. Sens. 1, H334; Carc. 2, H351; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412 Specific concentration limit: Resp. Sens. 1; H334: C ≥ 0.1 % substance with a Community workplace exposure limit	≥0.01-<0.1%

SVHC
This product does not contain candidate substances of very high concern at a concentration ≥0.1% (Regulation (EC) No 1907/2006 (REACH), Article 59)
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.
After inhalation:
If breathing is difficult, remove to fresh air. Restore breathing. Keep warm and quiet.
In case of unconsciousness place patient stably in side position for transportation.
In case of discomfort, call a doctor immediately.
After skin contact:
Remove contaminated clothing.
Rinse with plenty of water and soap.
Seek immediate medical advice.
After eye contact:
Immediately rinse the eyes with plenty of water, alternately lifting the upper and lower eyelids.
Check and remove contact lenses if any.
Continue to rinse for at least 15 minutes.
Seek medical attention if irritation occurs.
After swallowing:
Do not induce vomiting; call for medical help immediately.
Never give something by mouth to an unconscious person
Consult the doctor immediately and show the label or this Safety Data Sheet.
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.

(Contd. on page 5)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 4)

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents: CO2, powder or water spray.
For safety reasons unsuitable extinguishing agents: Water with full jet
5.2 Special hazards arising from the substance or mixture
Toxic gases can be released in the event of a fire.
Carbon oxides
5.3 Advice for firefighters
Protective equipment:
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:
Keep away from ignition sources.
Avoid inhalation of vapors.
Wear protective clothing.
Avoid contact with skin and eyes.
6.1.1 For non-emergency personnel Ensure sufficient ventilation.
6.1.2 For emergency responders
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 it to enter sewers/ surface or ground water. It must not penetrate the earth's waters.
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.
Avoid contact with skin and eyes.
Do not eat, drink or smoke when using this product.
Wash contaminated clothes before reusing them.
Wash your hands thoroughly after handling.
Information about fire - and explosion protection:


Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

(Contd. on page 6)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 5)

7.2 Conditions for safe storage, including any incompatibilities
Storage: Store in well-sealed containers and in well-ventilated areas. Keep it cool.
Requirements to be met by storerooms and receptacles:
Store in a cool location.
Provide ventilation for receptacles.
Information about storage in one common storage facility: Stored away from oxidizing agents.
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: 9016-87-9 diphenylmethane diisocyanate,isomeres and homologues	
WEL (United Kingdom)	Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO
CAS: 141-78-6 ethyl acetate	
IOELV (EU)	Short-term value: 1468 mg/m³, 400 ppm Long-term value: 734 mg/m³, 200 ppm
WEL (United Kingdom)	Short-term value: 1468 mg/m³, 400 ppm Long-term value: 734 mg/m³, 200 ppm
CAS: 4083-64-1 4-isocyanatosulphonyltoluene tosyl isocyanate	
WEL (United Kingdom)	Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO
CAS: 26471-62-5 m-tolylidene diisocyanate	
WEL (United Kingdom)	Short-term value: 0.07 mg/m³ Long-term value: 0.02 mg/m³ Sen; as -NCO
CAS: 98-59-9 tosyl chloride	
WEL (United Kingdom)	Short-term value: 5 mg/m³

DNELs		
Reaction mass of ethylbenzene and m-xylene and p-xylene		
Oral	DNEL General Population (long term exposure - systemic effect)	5 mg/kg bw/d (human)
Dermal	DNEL Workers (long term exposure - systemic effect)	212 mg/kg bw/d (human)
	DNEL General Population (long term exposure - systemic effect)	125 mg/kg bw/d (human)
Inhalative	DNEL Workers (long term exposure - systemic effect)	221 mg/m³ (human)

(Contd. on page 7)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 6)

	DNEL Workers (short term exposure - systemic effect)	442 mg/m³ (human)
	DNEL Workers (long term exposure - local effect)	221 mg/m³ (human)
	DNEL General Population (long term exposure - systemic effect)	65.3 mg/m³ (human)
	DNEL General Population (acute/short term exposure - local effect)	260 mg/m³ (human)
	DNEL General Population (long term exposure - local effect)	65.3 mg/m³ (human)
	DNEL General Population (acute/short term exposure - systemic effect)	260 mg/m³ (human)
	DNEL Workers (acute/short term exposure - local effect)	442 mg/m³ (human)
CAS: 141-78-6 ethyl acetate		
Oral	DNEL General Population (long term exposure - systemic effect)	4.5 mg/kg bw/d (human)
Dermal	DNEL Workers (long term exposure - systemic effect)	63 mg/kg bw/d (human)
	DNEL General Population (long term exposure - systemic effect)	37 mg/kg bw/d (human)
Inhalative	DNEL Workers (long term exposure - systemic effect)	734 mg/m³ (human)
	DNEL Workers (short term exposure - systemic effect)	1,468 mg/m³ (human)
	DNEL Workers (long term exposure - local effect)	734 mg/m³ (human)
	DNEL General Population (long term exposure - systemic effect)	367 mg/m³ (human)
	DNEL General Population (acute/short term exposure - local effect)	734 mg/m³ (human)
	DNEL General Population (long term exposure - local effect)	367 mg/m³ (human)
	DNEL General Population (acute/short term exposure - systemic effect)	734 mg/m³ (human)
	DNEL Workers (acute/short term exposure - local effect)	1,468 mg/m³ (human)
CAS: 4083-64-1 4-isocyanatosulphonyltoluene tosyl isocyanate		
Oral	DNEL General Population (long term exposure - systemic effect)	0.46 mg/kg bw/d (human)
Dermal	DNEL Workers (long term exposure - systemic effect)	0.92 mg/kg bw/d (human)

(Contd. on page 8)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 7)

	DNEL General Population (long term exposure - systemic effect)	0.46 mg/kg bw/d
Inhalative	DNEL Workers (long term exposure - systemic effect)	3.24 mg/m³ (human)
	DNEL General Population (long term exposure - systemic effect)	0.8 mg/m³ (human)
CAS: 26471-62-5 m-tolylidene diisocyanate		
Inhalative	DNEL Workers (long term exposure - systemic effect)	0.035 mg/m³ (human)
	DNEL Workers (short term exposure - systemic effect)	0.14 mg/m³ (human)
	DNEL General Population (acute/short term exposure - local effect)	0.14 mg/m³ (human)
	DNEL General Population (long term exposure - local effect)	0.035 mg/m³ (human)

PNECs

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

	PNEC freshwater	0.044 mg/l
	PNEC freshwater (intermittent releases)	0.01 mg/l
	PNEC marinewater	0.004 mg/l
	PNEC sediment freshwater	2.52 mg/kg dw
	PNEC sediment marinewater	0.252 mg/kg dw
	PNEC soil	0.852 mg/kg dw
	PNEC STP	1.6 mg/l
	PNEC marinewater (intermittent releases)	0.001 mg/l
CAS: 141-78-6 ethyl acetate		
Oral	PNEC Secondary poisoning	0.2 g/kg
	PNEC freshwater	0.24 mg/l
	PNEC freshwater (intermittent releases)	1.65 mg/l
	PNEC marinewater	0.024 mg/l
	PNEC sediment freshwater	1.15 mg/kg dw
	PNEC sediment marinewater	0.115 mg/kg dw
	PNEC soil	0.148 mg/kg dw
	PNEC STP	650 mg/l
CAS: 4083-64-1 4-isocyanatosulphonyltoluene tosyl isocyanate		
	PNEC freshwater	0.03 mg/l
	PNEC freshwater (intermittent releases)	0.3 mg/l
	PNEC marinewater	0.003 mg/l
	PNEC sediment freshwater	0.172 mg/kg dw
	PNEC sediment marinewater	0.017 mg/kg dw
	PNEC soil	0.017 mg/kg dw

(Contd. on page 9)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 8)

	PNEC STP	0.4 mg/l
CAS: 26471-62-5 m-tolylidene diisocyanate		
	PNEC freshwater	0.013 mg/l
	PNEC freshwater (intermittent releases)	0.125 mg/l
	PNEC marinewater	0.001 mg/l
	PNEC soil	1 mg/kg dw
	PNEC STP	1 mg/l

Ingredients with biological limit values:	
CAS: 9016-87-9 diphenylmethane diisocyanate,isomeres and homologues	
BMGV (United Kingdom)	1 µmol creatinine/mol Medium: urine Sampling time: At the end of the period od exposure Parameter: isocyanate-derived diamine

8.2 Exposure controls

8.2.1. Appropriate engineering controls Provide adequate ventilation.

Individual protection measures, such as personal protective equipment
General protective and hygienic measures:
Avoid contact with skin and eyes.
Do not eat, drink or smoke while using the product.
Remove contaminated clothes and wash before reusing them.
Do not breathe vapours or mists.
Keep away from food, beverages and pet food.
Wash hands before breaks and at the end of work.
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)

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material should be made considering the penetration times, rates of diffusion and the degradation
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. Further marks of quality vary 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 application.

(Contd. on page 10)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 9)

Penetration time of glove material
≥480 minutes
The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.
The breakthrough times according to EN 374 Part III do not always apply under real conditions. A maximum usage time corresponding to 50% of the breakthrough time is recommended.

Eye/face protection



Tightly sealed goggles (EN 166).

Body protection:



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

Environmental exposure controls
Dispose of flushing liquids in accordance with local and national regulations.

*

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Physical state	Liquid
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined
Melting point/freezing point:	Not determined
Boiling point or initial boiling point and boiling range	Not specified
Flammability	Flammable.
Lower and upper explosion limit	
Lower:	Not determined
Upper:	Not determined
Flash point:	27 °C (Reaction mass of ethylbenzene and m-xylene and p-xylene)
Auto-ignition temperature:	Not specified
Decomposition temperature:	Not determined
pH	Not determined
Viscosity:	
Kinematic viscosity	Not determined
Dynamic:	Not determined
Solubility	
water:	Not miscible
Partition coefficient n-octanol/water (log value)	Not determined
Vapour pressure:	Not determined
Density and/or relative density	
Density at 20 °C:	1 g/cm³
Relative density	Not determined
Vapour density	Not determined

(Contd. on page 11)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 10)

9.2 Other information

Appearance:	
Form:	Liquid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Solvent content:	
VOC (EC)	498 g/l
Change in condition	Not applicable
Fusion temperature / range:	Not applicable
Oxidising properties	Not oxidising
Evaporation rate	Not determined

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

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
To avoid thermal decomposition do not overheat.
Stable at environment temperature.
10.3 Possibility of hazardous reactions No dangerous reactions known.
10.4 Conditions to avoid Avoid heat, flames, sparks, other sources of ignition.
10.5 Incompatible materials Oxidizing agents
10.6 Hazardous decomposition products Carbon oxides (COx)

(Contd. on page 12)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 11)

*
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:
For the calculation of the ATEmix value for inhalation (vapours) the calculation formula of Regulation (EC) 1272/2008 (CLP) for mixtures was used.
The LC50 values (inhalation, vapour) of the substances were adjusted by a factor of 11 (Point estimate - Cat. 4 - acute toxicity), according to Annex I of Regulation (EC) No. CLP (1272/2008 EC), because for some substances no specific experimental LC50 data or numerical ATE values were available.
Based on the available classifications and toxicological information in accordance with the provisions of CLP, and on this basis, the final ATEmix value for inhalation (vapours) of the product was calculated.

ATE (Acute Toxicity Estimates)		
Inhalative	LC50/4 h (vapour)	22 mg/l

Reaction mass of ethylbenzene and m-xylene and p-xylene		
Oral	LD50	3,523 mg/kg (rat)
Dermal	LD50	12,126 mg/kg (rabbit)
Inhalative	LC50(4h)	27,124 mg/m³ air (rat)
CAS: 141-78-6 ethyl acetate		
Oral	LD50	4,934 mg/kg (rabbit)
Dermal	LD50	>20,000 mg/kg (rabbit)
Inhalative	LC50/4h	>18 mg/l (rat)
CAS: 4083-64-1 4-isocyanatosulphonyltoluene tosyl isocyanate		
Oral	LD50	2,330 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
CAS: 26471-62-5 m-tolylidene diisocyanate		
Oral	LD50	5,840 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)
Inhalative	LC50(4h)	0.48 mg/l (rat)

Specific symptoms in biological assay:
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
Carcinogen, Category 2
Suspected of causing cancer.
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.

(Contd. on page 13)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 12)

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
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Carc. 2
11.2 Information on other hazards
Endocrine disrupting properties
The product does not contain substances included in the list established in accordance with Article 59(1) of REACH for endocrine disrupting properties or has not been identified as having endocrine disrupting properties according to the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or higher than 0.1%.

None of the ingredients is listed.

*
SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:	
Reaction mass of ethylbenzene and m-xylene and p-xylene	
EC50 (72h)	4.6-4.9 mg/l (algae)
EC50 (48h)	10.389 mg/l (Daphnia magna)
LC50(96h)	>2.6 mg/l (fish)
CAS: 141-78-6 ethyl acetate	
LC50(96h)	230 mg/l (Pimephales promelas)
EC50(24h)	>165 mg/l (Daphnia magna)
NOEC(72h)	>100 mg/l (Desmodesmus subspicatus) (Freshwater Alga and Cyanobacteria, Grow Inhibition)
NOEC (21d)	2.4 mg/l (Daphnia magna)
CAS: 4083-64-1 4-isocyanatosulphonyltoluene tosyl isocyanate	
EC50 (72h)	30 mg/l (Pseudokirchneriella subcapitata) (Freshwater Alga and Cyanobacteria, Grow Inhibition)
	25-30 mg/l (aquatic algae and cyanobacteria)
EC50 (48h)	>100 mg/l (Daphnia magna) (Daphnia sp. Acute Immobilisation Test)
	100 mg/l (aquatic invertebrates)
LC50(96h)	>45 mg/l (Oncorhynchus mykiss) (Fish, Acute Toxicity Test)
LC50(48h)	45 mg/l (fish)
LC50(24h)	45 mg/l (fish)
NOEC(72h)	10 mg/l (aquatic algae and cyanobacteria)
CAS: 26471-62-5 m-tolylidene diisocyanate	
EC50 (72h)	3,230 mg/l (algae)
EC50 (48h)	12.5 mg/l (daphnia magna)
LC50(96h)	133 mg/l (fish)

12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential No further relevant information available.

(Contd. on page 14)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 13)

12.4 Mobility in soil No further relevant information available.
12.5 Results of PBT and vPvB assessment
The product does not contain ingredients that are considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative at levels of 0.1% or higher according to REACH, Annex XIII.
PBT: Not applicable
vPvB: Not applicable
12.6 Endocrine disrupting properties
The product does not contain substances included in the list established in accordance with Article 59(1) of REACH for endocrine disrupting properties or has not been identified as having endocrine disrupting properties according to the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or higher than 0.1%.
12.7 Other adverse effects
The product does not contain substances listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.
Remark: Harmful to fish
Additional ecological information:
General notes:
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
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.

Contact manufacturer for recycling information.

European waste catalogue	
HP3	Flammable
HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP6	Acute Toxicity
HP7	Carcinogenic
HP13	Sensitising
HP14	Ecotoxic

Uncleaned packaging:
Recommendation: Disposal must be made according to official regulations.

(Contd. on page 15)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 14)

SECTION 14: Transport information

14.1 UN number or ID number
ADR, IMDG, IATA UN1866
14.2 UN proper shipping name
ADR UN1866 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

Transport/Additional information:

ADR
Limited quantities (LQ) 5L


Limited Quantity Marking.

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 D/E

IMDG
Limited quantities (LQ) 5L


Limited Quantity Marking.

Excepted quantities (EQ) Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml

(Contd. on page 16)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 15)

UN "Model Regulation": 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) 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 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 The substance is not included in Annex I.
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

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.

REGULATION (EU) 2019/1148

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))
None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS
None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors
None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.

National regulations: None

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
H225 Highly flammable liquid and vapour.

(Contd. on page 17)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 16)

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.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.
EUH014 Reacts violently with water.
EUH066 Repeated exposure may cause skin dryness or cracking.
EUH204 Contains isocyanates. May produce an allergic reaction.

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.

Classification according to Regulation (EC) No 1272/2008	
Flammable liquids	Bridging principles
Skin corrosion/irritation Serious eye damage/irritation Respiratory sensitisation Skin sensitisation Carcinogenicity Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
Aspiration hazard	Expert judgement

Department issuing SDS:

SUSTCHEM S.A.
REACH & Chemical Services Department
A: 144, 3rd Septemvriou, GR 112 51 | Athens, Greece
T: +30 210 8252510 | F: +30 210 8252575
W: www.sustchem.gr | E: info@sustchem.gr

Version number of previous version: 5

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)

(Contd. on page 18)

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

Printing date 05.02.2026 Version number 6 (replaces version 5) Revision: 05.02.2026

Trade name: PENEPRIMER™ PU

(Contd. of page 17)

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
ATE: Acute toxicity estimate values
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3