

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

Printing date 17.07.2018

Version number 1

Revision: 30.01.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name:** PU 805 E 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:

Sealing

Coating

Hardening agent/ Curing agent

Isocyanate resin

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

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:**

GHS06 skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



GHS07

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.

Hazard pictograms:

GHS06

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

Printing date 17.07.2018

Version number 1

Revision: 30.01.2018

Trade name: PU 805 E COMPONENT B

(Contd. of page 1)

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

hexamethylene-1,6-diisocyanate homopolymer
 HDI Polyisocyanate
 hexamethylene-di-isocyanate

Hazard statements:

H331 Toxic if inhaled.
 H317 May cause an allergic skin reaction.
 H335 May cause respiratory irritation.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P273 Avoid release to the environment.
 P280 Wear protective gloves.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information: Contains epoxy constituents. May produce an allergic reaction.**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****3.2 Chemical characterisation: Mixtures****Description:** Mixture: consisting of the following components.**Ingredients according Regulation (EU) 830/2015:**

CAS: 28182-81-2 NLP: 500-060-2 Reg.nr.: 01-2119485796-17-XXXX	hexamethylene-1,6-diisocyanate homopolymer ⚠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	50-100%
CAS: 160994-68-3 EC number: 679-501-7	HDI Polyisocyanate ⚠ Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Chronic 3, H412	10-25%
CAS: 822-06-0 EINECS: 212-485-8 Index number: 615-011-00-1 Reg.nr.: 01-2119457571-37-XXXX	hexamethylene-di-isocyanate ⚠ Acute Tox. 3, H331; ⚠ Resp. Sens. 1, H334; ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	0.1-<0.5%

GB

(Contd. on page 3)

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

Printing date 17.07.2018

Version number 1

Revision: 30.01.2018

Trade name: PU 805 E COMPONENT B

(Contd. of page 2)

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: CO₂, 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:

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.

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.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

(Contd. on page 4)

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

Printing date 17.07.2018

Version number 1

Revision: 30.01.2018

Trade name: PU 805 E COMPONENT B

See Section 13 for disposal information.

(Contd. of page 3)

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Ensure good ventilation.

Do not breathe vapor or mist.

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: Not required.

Further information about storage conditions: Keep container tightly sealed.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

CAS: 822-06-0 hexamethylene-di-isocyanate

WEL (Great Britain)	Short-term value: 0.07 mg/m ³
	Long-term value: 0.02 mg/m ³
	Sen; as -NCO

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.

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

(Contd. on page 5)

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

Printing date 17.07.2018

Version number 1

Revision: 30.01.2018

Trade name: PU 805 E COMPONENT B

(Contd. of page 4)

Material of gloves

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.

Butyl rubber, BR, Nitrile rubber, NBR

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

Body protection:

Protective work clothing

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

Form:	Liquid
Colour:	Yellowish
Odour:	Odourless
Odour threshold:	Not determined

pH value: Not determined

Melting point/freezing point: -30 °C

Initial boiling point and boiling range: >300 °C

Flash point: 184 °C

Flammability (solid, gas): Not applicable

Auto-ignition temperature: 465 °C

Decomposition temperature: Not determined

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined
Upper:	Not determined

Vapour pressure: Not determined

Density at 20 °C: 1.15 g/cm³

(Contd. on page 6)

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

Printing date 17.07.2018

Version number 1

Revision: 30.01.2018

Trade name: PU 805 E COMPONENT B

(Contd. of page 5)

Relative density Not determined**Vapour density at 20 °C** <0.0001 hpa**Evaporation rate** Not determined**Solubility in / Miscibility with water:** Insoluble**Partition coefficient: n-octanol/water:** Not determined**Viscosity:****Dynamic at 20 °C:** 1400 mPas**Kinematic:** Not determined**9.2 Other information** 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, amines, aqueous acids and alkalis.

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**

Toxic if inhaled.

LD/LC50 values relevant for classification:

28182-81-2 Hexamethylen-1,6-diisocyanat, homopolymer

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

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

Inhalative LC50/4 h 0.543 mg/l (rat)

160994-68-3 aliphatic polyisocyanate

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

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

PU 806 E COMPONENT B

Inhalative LC50/4 h (vapour) >8.67-18.2 mg/l

CAS: 822-06-0 hexamethylene-di-isocyanate

Oral LD50 738 mg/kg (rat)

Dermal LD50 593 mg/kg (rat)

Skin corrosion/irritation Based on available data, the classification criteria are not met.**Serious eye damage/irritation** Based on available data, the classification criteria are not met.**Respiratory or skin sensitisation**

May cause an allergic skin reaction.

(Contd. on page 7)

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

Printing date 17.07.2018

Version number 1

Revision: 30.01.2018

Trade name: PU 805 E COMPONENT B

(Contd. of page 6)

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**Germ cell mutagenicity** Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** Based on available data, the classification criteria are not met.**STOT-single exposure**

May cause respiratory irritation.

STOT-repeated exposure Based on available data, the classification criteria are not met.**Aspiration hazard** Based on available data, the classification criteria are not met.**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:**

160994-68-3 aliphatic polyisocyanate

EC50/48 h >100 mg/l (Daphnia (Wasserfloh))

LC50/96 h 23.8 mg/l (Danio rerio (Zebrabärbling))

822-06-0 hexamethylene-di-isocyanate

EC50/72h >77.4 mg/l (Scenedesmus subspicatus (Alge))

LC0/96h 82.8 mg/l (Danio rerio (Zebrabärbling))

EC0 >89.1 mg/l (Daphnia (Wasserfloh))

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.**Ecotoxicical effects:****Remark:** Toxic for fish**Additional ecological information:****General notes:**

Also poisonous for fish and plankton in water bodies.

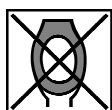
Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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.

(Contd. on page 8)

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

Printing date 17.07.2018

Version number 1

Revision: 30.01.2018

Trade name: PU 805 E COMPONENT B

(Contd. of page 7)

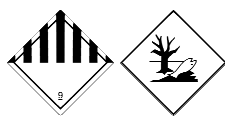
Uncleaned packaging:**Recommendation:**

Disposal must be made according to official regulations.

Packaging may be reused or recycled after cleaning.

SECTION 14: Transport information**14.1 UN-Number****ADR, IMDG, IATA**

UN3082

14.2 UN proper shipping name**ADR**3082 ENVIRONMENTALLY HAZARDOUS
SUBSTANCE, LIQUID, N.O.S.**IMDG**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S., MARINE POLLUTANT**IATA**ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
LIQUID, N.O.S.**14.3 Transport hazard class(es)****ADR, IMDG, IATA****Class**

9 Miscellaneous dangerous substances and articles.

Label

9

14.4 Packing group**ADR, IMDG**

III

14.5 Environmental hazards:**Marine pollutant:**

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

A

14.7 Transport in bulk according to Annex II of**Marpol and the IBC Code**

Not applicable.

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

5L

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

IMDG**Limited quantities (LQ)**

5L

(Contd. on page 9)

GB

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

Printing date 17.07.2018

Version number 1

Revision: 30.01.2018

Trade name: PU 805 E COMPONENT B

(Contd. of page 8)

Excepted quantities (EQ)

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation":

UN 3082 ENVIRONMENTALLY HAZARDOUS

SUBSTANCE, LIQUID, N.O.S., 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 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**Seveso category H2 H2 ACUTE TOXIC****Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t****Qualifying quantity (tonnes) for the application of upper-tier requirements 200 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

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

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.

H412 Harmful to aquatic life with long lasting effects.

Training hints

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

(Contd. on page 10)

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

Printing date 17.07.2018

Version number 1

Revision: 30.01.2018

Trade name: PU 805 E COMPONENT B

(Contd. of page 9)

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
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
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
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
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

GB