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

Printing date 23.05.2018 Version number 1 Revision: 23.05.2018

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

1.1 Product identifier

Trade name: PU 475 COMPONENT A

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.
Application of the substance / the mixture:
Coating
Polyurethane 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:



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

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:



GHS07

Signal word: Warning

Hazard-determining components of labelling:
bis(4-(1,2-bis(ethoxycarbonyl)ethy-lamino)-3-methylcyclohexyl)methane

Hazard statements:
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

(Contd. on page 2)

Safety data sheet
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Printing date 23.05.2018 Version number 1 Revision: 23.05.2018

Trade name: PU 475 COMPONENT A

(Contd. of page 1)

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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: 136210-32-7 ELINCS: 412-060-9 Index number: 607-350-00-9	bis(4-(1,2-bis(ethoxycarbonyl)ethy-lamino)-3-methylcyclohexyl) methane Skin Sens. 1, H317; Aquatic Chronic 3, H412	≤10%
CAS: 623-91-6 EINECS: 210-819-7	diethyl fumarate Aquatic Chronic 2, H411; Acute Tox. 4, H302	2.5-<10%

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.

(Contd. on page 3)

Safety data sheet
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Printing date 23.05.2018 Version number 1 Revision: 23.05.2018

Trade name: PU 475 COMPONENT A

(Contd. of page 2)

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 protectice 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.
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.
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:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

8.2.1. Appropriate engineering controls
Take appropriate protective measures with regard to the handling of chemicals and mixtures.

(Contd. on page 4)

Safety data sheet
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Printing date 23.05.2018 Version number 1 Revision: 23.05.2018

Trade name: PU 475 COMPONENT A

(Contd. of page 3)

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
Material of gloves
Butyl rubber, BR - 0,7 mm
Nitrile rubber, NBR- 0,4 mm
Neoprene
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

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:	Colourless
Odour:	Characteristic

(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 23.05.2018 Version number 1 Revision: 23.05.2018

Trade name: PU 475 COMPONENT A

(Contd. of page 4)

Odour threshold:	Not determined
pH value:	Not determined
Flash point:	>100 °C
Flammability (solid, gas):	Not applicable
Auto-ignition temperature:	Not determined
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:	1.04 g/cm³
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:	250 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 Based on available data, the classification criteria are not met.

(Contd. on page 6)

Safety data sheet
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Printing date 23.05.2018 Version number 1 Revision: 23.05.2018

Trade name: PU 475 COMPONENT A

(Contd. of page 5)

LD/LC50 values relevant for classification:		
ATE (Acute Toxicity Estimates)		
Oral	LD50	>17,800-71,200 mg/kg (rat)

623-91-6 diethyl fumarate		
Oral	LD50	1,780 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.
Repeated dose toxicity Based on the data, the classification criteria are not fulfilled.
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
Germ cell mutagenicity Based on available data, the classification criteria are not met.
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 Based on available data, the classification criteria are not met.
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: No further relevant information available.
12.2 Persistence and degradability No further relevant information available.
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.
Ecotoxical effects:
Remark: Harmful to fish
Additional ecological information:
General notes:
The product contains materials that are harmful to the environment.
Harmful to aquatic organisms
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 7)

Safety data sheet
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Printing date 23.05.2018 Version number 1 Revision: 23.05.2018

Trade name: PU 475 COMPONENT A

(Contd. of page 6)

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.

SECTION 14: Transport information

14.1 UN-Number	
ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name	
ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR, ADN, IMDG, IATA	
Class	Void
14.4 Packing group	
ADR, IMDG, IATA	Void
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
UN "Model Regulation":	Void

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
REACH Regulation 1907/2006/EC
Regulation (EU) 2015/830
CLP Regulation 1272/2008/EC
Directive 98/24/EC on the protection of health and safety of workers from the risks related to chemicals agents at work.
Council Directive 94/33/EC on the protection of young people at work, as ammended.
Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding, as ammended

Directive 2012/18/EU
Named dangerous substances - ANNEX I Substance is not listed.
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.

(Contd. on page 8)

Safety data sheet
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Printing date 23.05.2018 Version number 1 Revision: 23.05.2018

Trade name: PU 475 COMPONENT A

(Contd. of page 7)

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.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.
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.

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)
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
Acute Tox. 4: Acute toxicity – Category 4
Skin Sens. 1: Skin sensitisation – 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