

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

1.1 Product identifier

Trade name: **SAPPHIRE PU HARDENER Part B**

Article number: V11149

UFI: R1U1-A0K0-9008-22PH

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

Life cycle stages IS Use at industrial Sites

Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category PC9a Coatings and paints, thinners, paint removers

Process category PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

Environmental release category ERC2 Formulation into mixture

Article category AC1 Vehicles

Technical function Hardener

Application of the substance / the mixture Surface protection

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:



VEMAR YACHT COATINGS

HB BODY S.A. ATHENS - DIYLISTIRION AV. - GR 19300 - ASPROPYRGOS - GREECE

T: +30 210 55 90 411-2 F: +30 210 55 90 713

email: sales@vemarcoatings.com website: www.vemarcoatings.com

Further information obtainable from:



VEMAR YACHT COATINGS

HB BODY S.A. ATHENS - DIYLISTIRION AV. - GR 19300 - ASPROPYRGOS - GREECE

T: +30 210 55 90 411-2 F: +30 210 55 90 713

email: sales@vemarcoatings.com website: www.vemarcoatings.com

1.4 Emergency telephone number:

Regional Medicines and Poisons Information Centre NI

Pharmacy Department, Royal Hospital Suite

Grosvenor Road Belfast

Telephone: +44 28 90 63 2032

Fax: +44 28 90 24 80 30

Emergency telephone: 844 892 0111

E-mail address: nirdic.nirdic@belfasttrust.hscni.net

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS07

Trade name: SAPPHIRE PU HARDENER Part B

Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H336 May cause drowsiness or dizziness.
Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

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

Hazard pictograms



Signal word Warning

Hazard-determining components of labelling:

Isocyanates
n-butyl ester
Solvent naphtha (petroleum), light arom.

Hazard statements

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

This product contains no substance that is considered to be persistent, bioaccumulating or non toxic (PBT). This mixture contains no substance that is considered to be very persistent or very bioaccumulating (vPvB).

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of hazardous substances listed below with nonhazardous additions.

Dangerous components:

CAS: 28182-81-2	Isocyanates	45-<50%
NLP: 500-060-2	⚠ Skin Sens. 1, H317 ⚠ Aquatic Chronic 3, H412	
CAS: 123-86-4	n-butyl ester	20-<25%
EINECS: 204-658-1	⚠ Flam. Liq. 3, H226 ⚠ STOT SE 3, H336	
Index number: 607-025-00-1		
RTECS: AF 7350000		
Reg.nr.: 01-2119485493-29-007		
01-2119485493-29-004		
01-2119485493-29-003		
01-2119485493-29-005		
01-2119485493-29		
CAS: 1330-20-7	xylene	15-<20%
Index number: 601-022-00-9	⚠ Flam. Liq. 3, H226 ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	

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GB

Trade name: SAPPHIRE PU HARDENER Part B

CAS: 64742-95-6	Solvent naphtha (petroleum), light arom.	5-<10%
EINECS: 265-199-0	Flam. Liq. 3, H226	
Index number: 649-356-00-4	Asp. Tox. 1, H304	
Reg.nr.: 01-2119455851-35-0001	Aquatic Chronic 2, H411	
	Acute Tox. 4, H332; STOT SE 3, H335	
	STOT SE 3, H336	
	Note: H, P, 4	
CAS: 112-07-2	2-butoxyethyl acetate	1-<5%
EINECS: 203-933-3	Acute Tox. 4, H312; Acute Tox. 4, H332	
Index number: 607-038-00-2		
RTECS: KJ 8925000		
Reg.nr.: 01-2119475112-47-0002		
CAS: 108-65-6	2-methoxy-1-methylethyl acetate	1-<5%
EINECS: 203-603-9	Flam. Liq. 3, H226	
Index number: 607-195-00-7		
Reg.nr.: 01-2119475791-29-0001		
01-2119475791-29		

- **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:** Immediately remove any clothing soiled by the product.
- **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.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **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 fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
Firefighters should always protective equipment and breathing apparatus when handling fire coming from these products
- **5.6 Fire and explosion Hazards**
- **Speial protective equipment and fire fighting procedures:**
Firefighters should wear full protective flameproof clothing and self contained breathing apparatus for the firefighter if necessary. In the event of any fire try cool down the tanks with water spray. If possible do not allow the water used by firefighters to enter the drains or come in any contact with the water supply lines for the public. Always seek as appropriate.
- **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.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
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.

Trade name: SAPPHIRE PU HARDENER Part B

- Prevent formation of aerosols.
- 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: No special requirements.
 - 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:**
 - 28182-81-2 Isocyanates**
 - WEL Short-term value: 0.07 mg/m³
 - Long-term value: 0.02 mg/m³
 - Sen; as -NCO
 - 123-86-4 n-butyl ester**
 - WEL Short-term value: 966 mg/m³, 200 ppm
 - Long-term value: 724 mg/m³, 150 ppm
 - 1330-20-7 xylene**
 - WEL Short-term value: 441 mg/m³, 100 ppm
 - Long-term value: 220 mg/m³, 50 ppm
 - Sk; BMGV
 - 112-07-2 2-butoxyethyl acetate**
 - WEL Short-term value: 332 mg/m³, 50 ppm
 - Long-term value: 133 mg/m³, 20 ppm
 - Sk
 - 108-65-6 2-methoxy-1-methylethyl acetate**
 - WEL Short-term value: 548 mg/m³, 100 ppm
 - Long-term value: 274 mg/m³, 50 ppm
 - Sk
- Regulatory information WEL: EH40/2020
- Ingredients with biological limit values:
 - 28182-81-2 Isocyanates**
 - BMGV 1 µmol creatinine/mol
 - Medium: urine
 - Sampling time: At the end of the period of exposure
 - Parameter: isocyanate-derived diamine
 - 1330-20-7 xylene**
 - BMGV 650 mmol/mol creatinine
 - Medium: urine
 - Sampling time: post shift
 - Parameter: methyl hippuric acid
- Additional information: The lists valid during the making were used as basis.
- 8.2 Exposure controls**
- Personal protective equipment:**
- General protective and hygienic measures:
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the skin.
 - Avoid contact with the eyes and skin.
- Respiratory protection:
 - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- 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.

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- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- 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 preparation 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 exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:
The breakthrough time of gloves is unknown for this product itself. The glove material that can be used is recommended on the basis of the different substances in the preparation.
- For the permanent contact gloves made of the following materials are suitable: Fluorocarbon rubber (Viton)
- For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable: Rubber gloves
- 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
- Odour threshold:** Not determined.
- pH-value:** Mixture is non-soluble (in water).
- Change in condition**
 - Melting point/freezing point: Undetermined.
 - Initial boiling point and boiling range: 124-128 °C (123-86-4 n-butyl ester)
- Flash point:** 23 - 60 °C
- Flammability** Flammable.
- Autoignition temperature:** 370 °C
- Decomposition temperature:** Not determined.
- Ignition temperature:** Product is not selfigniting.
- Explosive properties:** Risk of explosion by shock, friction, fire or other sources of ignition.
- Explosion limits:**
 - Lower: 1.1 Vol %
 - Upper: 7.5 Vol %
- Vapour pressure at 20 °C:** 10.7 hPa
- Density at 20 °C:** 1.01174-1.01307 g/cm³
- Relative density** Not determined.
- Vapour density** Not determined.
- Evaporation rate** Not determined.
- Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- Partition coefficient: n-octanol/water:** Not determined.
- Viscosity:**
 - Dynamic: Not determined.
 - Kinematic at 20 °C: 0 mm²/s
- Solvent content:**
 - Organic solvents: 52.2 %
 - VOC (EC) 528.6-529.3 g/l
 - Solids content (volume): 0.0 %
- 9.2 Other information** No further relevant information available.

Trade name: **SAPPHIRE PU HARDENER Part B**

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **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 toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- LD/LC50 values relevant for classification:
ATE (Acute Toxicity Estimates)
Dermal LD50 8,773 mg/kg
Inhalative LC50/4 h >40.2 mg/l
- **123-86-4 n-butyl ester**
Oral LD50 13,100 mg/kg (rat)
Dermal LD50 >5,000 mg/kg (rabbit)
Inhalative LC50/4 h >21 mg/l (rat)
- **1330-20-7 xylene**
Oral LD50 4,300 mg/kg (rat)
Dermal LD50 2,000 mg/kg (rabbit)
Inhalative LC50/4 h 11 mg/l (ATE)
- **64742-95-6 Solvent naphtha (petroleum), light arom.**
Oral LD50 >6,800 mg/kg (rat)
Dermal LD50 >3,400 mg/kg (rab)
Inhalative LC50/4 h >10.2 mg/l (rat)
- **112-07-2 2-butoxyethyl acetate**
Oral LD50 2,400 mg/kg (rat)
Dermal LD50 1,580 mg/kg (rabbit)
Inhalative LC50/4 h 11 mg/l (ATE)
- **108-65-6 2-methoxy-1-methylethyl acetate**
Oral LD50 8,532 mg/kg (rat)
Inhalative LC50/4 h 35.7 mg/l (rat)
- Primary irritant effect:
- Skin corrosion/irritation
Causes skin irritation.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation
May cause an allergic skin reaction.
- **Additional toxicological information:**
- CMR effects (carcinogenicity 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 drowsiness or dizziness.
- 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:**
This product is not toxic for the aquatic life. Nevertheless do not dispose the product or any cleaning solvents used along with this product into the sea
- **12.2 Persistence and degradability**
This product contains polyesteric molecules and organic solvents and is not known to be bioaccumulative. It can be considered as biodegradable in small quantities. In case of disposal, it should be treated as a hazardous material and should be disposed accordingly. Do not just throw it away
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

Trade name: SAPPHIRE PU HARDENER Part B

- **Ecotoxical effects:**
- Remark: Harmful to fish
- **Additional ecological information:**
- General notes:
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
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.
Harmful to aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** This product contains no substance that is considered to be persistent, bioaccumulating or non toxic (PBT).
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **European waste catalogue**
HP3 Flammable
HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP13 Sensitising
HP14 Ecotoxic
- **Uncleaned packaging:**
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1263
- **14.2 UN proper shipping name**
- **ADR** UN1263 PAINT
- **IMDG, IATA** PAINT
- **14.3 Transport hazard class(es)**
- **ADR**
- 
- Class 3 (F1) Flammable liquids.
- Label 3
- **IMDG, IATA**
- 
- Class 3 Flammable liquids.
- Label 3
- **14.4 Packing group**
- **ADR, IMDG, IATA** III
- **14.5 Environmental hazards:** Not applicable.
- **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 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

Trade name: **SAPPHIRE PU HARDENER Part B**

• <u>Transport category</u>	3
• <u>Tunnel restriction code</u>	D/E
• <u>IMDG</u>	
• <u>Limited quantities (LQ)</u>	5L
• <u>Excepted quantities (EQ)</u>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
• <u>IATA</u>	
• <u>Remarks:</u>	• 3Y
• UN "Model Regulation":	UN 1263 PAINT, 3, III

SECTION 15: Regulatory information

- 3Y
- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
28182-81-2 Isocyanates 45-<50%
- Poisons Act
- Regulated explosives precursors
None of the ingredients is listed.
- Regulated poisons
None of the ingredients is listed.
- Reportable explosives precursors
None of the ingredients is listed.
- Reportable poisons
None of the ingredients is listed.
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the GB CLP regulation.
- Hazard pictograms

GHS02 GHS07
- Signal word Warning
- Hazard-determining components of labelling:
Isocyanates
n-butyl ester
Solvent naphtha (petroleum), light arom.
- Hazard statements
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.
- Precautionary statements
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P241 Use explosion-proof [electrical/ventilating/lighting] equipment.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- Named dangerous substances - ANNEX I None of the ingredients is 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
- 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.

Trade name: **SAPPHIRE PU HARDENER Part B**

- 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.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our current 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.

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.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

- Classification according to Regulation (EC) No 1272/2008

Flammable liquids

Skin corrosion/irritation

Skin sensitisation

Specific target organ toxicity (single exposure)

Hazardous to the aquatic environment - long-term (chronic)
aquatic hazard

Bridging principles

The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

- **Contact:**



VEMAR YACHT COATINGS

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email: sales@vemarcoatings.com website: www.vemarcoatings.com

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

Trade name: **SAPPHIRE PU HARDENER Part B**

* **Annex: Exposure scenario**

• **Short title of the exposure scenario**

• **Sector of Use**

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

• **Product category** PC9a Coatings and paints, thinners, paint removers

• **Process category** PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

• **Article category** AC1 Vehicles

• **Environmental release category** ERC2 Formulation into mixture

• **Technical function** Hardener

• **Description of the activities / processes covered in the Exposure Scenario**

See section 1 of the annex to the Safety Data Sheet.

• **Conditions of use** According to directions for use.

• **Duration and frequency** Frequency of use:

• **Physical parameters**

The data on the physical - chemical properties in the Exposure Scenario is based on the properties of the preparation.

• **Physical state** Fluid

• **Concentration of the substance in the mixture** The substance is main component.

• **Used amount per time or activity** Smaller than 100 g per application.

• **Other operational conditions**

• **Other operational conditions affecting environmental exposure**

No special measures required.

Use only on hard ground.

• **Other operational conditions affecting worker exposure**

Avoid contact with the skin.

Avoid long-term or repeated skin contact.

Do not breathe gas/vapour/aerosol.

Take precautionary measures against static discharge.

Keep away from sources of ignition - No smoking.

Avoid contact with eyes.

• **Other operational conditions affecting consumer exposure** No special measures required.

• **Other operational conditions affecting consumer exposure during the use of the product** Not applicable.

• **Risk management measures**

• **Worker protection**

• Organisational protective measures

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

• Technical protective measures

Provide explosion-proof electrical equipment.

Ensure that suitable extractors are available on processing machines

Use product only in enclosed systems.

• Personal protective measures

Do not inhale gases / fumes / aerosols.

Avoid contact with the skin.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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

Avoid contact with the eyes.

Tightly sealed goggles

• **Measures for consumer protection**

Ensure adequate labelling.

Observe consumer information and advice on safe use.

• **Environmental protection measures**

• Water

Do not allow to reach sewage system. Dispose of this product and its container at hazardous or special waste collection point.

Do not allow to reach sewage system.

• Soil

The product is only processed over the concrete collecting basin.

Prevent contamination of soil.

• **Disposal measures** Ensure that waste is collected and contained.

• **Disposal procedures** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

• **Waste type** Partially emptied and uncleaned packaging

• **Exposure estimation**

• **Consumer**

This product is to be used by professional technicians only.

Not relevant for this Exposure Scenario.

• **Guidance for downstream users**

Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.