

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 08.03.2017

V - 1

Revision: 08.03.2017

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

- **1.1 Product identifier**
 - **Trade name:** YACHTCARE Polyglas Repair Kit VT
 - **1.2 Relevant identified uses of the substance or mixture and uses advised against** Not determined
 - **Application of the substance / the mixture** Polyester resin
 - **1.3 Details of the supplier of the safety data sheet**
 - **Manufacturer/Supplier:**
Vosschemie GmbH
Esinger Steinweg 50
D-25436 Uetersen
Phone: +49 (0)4122 717 0; Fax: +49 (0)4122 717158; info@vosschemie.de
 - **Further information obtainable from:**
Abteilung Labor / +49 (0)4122 717 0
s.schaller@vosschemie.de
 - **1.4 Emergency telephone number:**
Giftinformationszentrum (GIZ)-Nord, Goettingen, Deutschland
Phone: +49 (0)551 19240
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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

Skin Irrit. 2 H315 Causes skin irritation.

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Eye Irrit. 2 H319 Causes serious eye irritation.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

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

· Hazard pictograms



GHS02 GHS07

· Signal word Warning

· Hazard statements

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

· Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

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 of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 25013-15-4 EINECS: 246-562-2 Reg.nr.: 01-2119622074-50	vinyltoluene Flam. Liq. 3, H226; Asp. Tox. 1, H304; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	25-50%
CAS: 123-31-9 EINECS: 204-617-8 Reg.nr.: 01-2119524016-51	1,4-dihydroxybenzene Muta. 2, H341; Carc. 2, H351; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=1); Acute Tox. 4, H302; Skin Sens. 1, H317	<0.1%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures**· 4.1 Description of first aid measures****· General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Personal protection for the First Aider.

Take affected persons out of danger area and lay down.

In case of irregular breathing or respiratory arrest provide artificial respiration.

Immediately remove any clothing soiled by the product.

· After inhalation:

Supply fresh air or oxygen; call for 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.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

Call a doctor immediately.

· After swallowing: Do not induce vomiting; call for medical help immediately.**· 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.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· 5.2 Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

· 5.3 Advice for firefighters**· Protective equipment:**

Wear self-contained respiratory protective device.

Do not inhale explosion gases or combustion gases.

· Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures**· 6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Avoid contact with the eyes and skin.

Ensure adequate ventilation

Keep away from ignition sources.

· 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

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

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- **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 item 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**
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Use explosion-proof apparatus / fittings and spark-proof tools.
Fumes can combine with air to form an explosive mixture.
Ground/bond container and receiving equipment.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:**
Store away from oxidising agents.
Store away from foodstuffs.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Store receptacle in a well ventilated area.
Protect from heat and direct sunlight.
Keep ignition sources away - Do not smoke.
- **Recommended storage temperature:** < 30 °C
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

123-31-9 1,4-dihydroxybenzene

WEL (Great Britain) Long-term value: 0.5 mg/m³

· **DNELs**

25013-15-4 vinyltoluene

Inhalative Long-term exposure - systemic effects 37 mg/m³ (worker)

Long-term exposure - local effects 37 mg/m³ (worker)

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· **PNECs****25013-15-4 vinyltoluene**

PNEC aqua	0.0498 mg/l (freshwater)
	0.002 mg/l (marine water)
PNEC sediment	0.684 mg/kg (freshwater)
	0.0684 mg/kg (marine water)
PNEC STP	1 mg/l
PNEC soil	0.133 mg/kg (soil dw)

· **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.

Do not eat, drink, smoke or sniff while working.

Store protective clothing separately.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Use skin protection cream for skin protection.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

Ensure good ventilation/exhaustion at the workplace.

Adhere to the workplace limit values and / or other threshold values.

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.

Filter A/P2

· **Protection of hands:**

Protective gloves

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

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Check the permeability prior to each renewed use of the glove.

Preventive skin protection by use of skin-protecting agents is recommended.

· **Material of gloves**

Fluorocarbon rubber (Viton)

Recommended thickness of the material: ≥ 0.4 mm

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**

Value for the permeation: Level ≤ 6 (≥ 480 min)

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **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:	Fluid
· Colour:	Amber coloured
· Odour:	Characteristic

· **Change in condition**

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	168 °C

· Flash point:	54 °C
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· Ignition temperature:	480 °C
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· Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
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· **Explosion limits:**

· Lower:	1.2 Vol %
· Upper:	8.9 Vol %

· Vapour pressure at 20 °C:	6 hPa
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· Density at 20 °C:	1.1 g/cm ³
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· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
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· **Viscosity:**

· Dynamic:	Not determined.
· Kinematic at 40 °C:	23 mm ² /s

· 9.2 Other information	No further relevant information available.
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SECTION 10: Stability and reactivity

· **10.1 Reactivity** No decomposition if used and stored according to specifications.

· **10.2 Chemical stability** No decomposition if used and stored according to specifications.

· **10.3 Possibility of hazardous reactions** Exothermic polymerisation.

· **10.4 Conditions to avoid**

Avoid naked flames, sparks, other ignition sources and sunlight.
Protect from heat.

· **10.5 Incompatible materials:**

Reacts with strong oxidising agents.
Reacts with peroxides and other radical forming substances.

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- **10.6 Hazardous decomposition products:**
Formation of toxic gases is possible during heating or in case of fire.

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:**

25013-15-4 vinyltoluene

Oral	LD50	3680 mg/kg (rat)
Dermal	LD50	4490 mg/kg (rabbit)
Inhalative	LC50 /4h	16.891 mg/l (rat)
	LC50 /4h	> 3535 ppm (rat)

123-31-9 1,4-dihydroxybenzene

Oral	LD50	302 mg/kg (rat) (IUCLID)
	LDLo	29 mg/kg (human) (RTECS)
Dermal	LD50	5970 mg/kg (rabbit)
	LD 50	> 900 mg/kg (rat) (IUCLID)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.

- **Subacute to chronic toxicity:**

25013-15-4 vinyltoluene

Oral	NOAEL (subacute)	50 mg/kg (mouse) (90d)
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123-31-9 1,4-dihydroxybenzene

Oral	NOAEL (subchronic)	25 mg/kg (rat)
Dermal	NOAEL (subchronic)	73.9 mg/kg (rat)

- **Additional toxicological information:** Causes damage to organs through prolonged or repeated exposure.
- **Sensitisation** No sensitising effects known.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

- **Carcinogenicity**

25013-15-4 vinyltoluene

Inhalative	NOAEL (carcinogenicity)	≥25 mg/m ³ (mouse) (OECD 451 (ppm))
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- **Reproductive toxicity/Fertility** No further relevant information available.

- **Reproductive toxicity/Teratogenicity**

25013-15-4 vinyltoluene

Oral	LOAEL (teratogenicity)	50 mg/kg (rat) (OECD 414)
	NOAEL (teratogenicity)	600 mg/kg (rat) (bw/day, OECD 414)

- **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.

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· **Aspiration hazard** Based on available data, the classification criteria are not met.**SECTION 12: Ecological information**· **12.1 Toxicity**· **Aquatic toxicity:****25013-15-4 vinyltoluene**

EC50/48h	1.3 mg/l (<i>daphnia magna</i>)
EC50/72h	2.6 mg/l (<i>Pseudokirchneriella subcapitata</i>)
LC50/96h	5.2 mg/l (<i>pimephales promelas</i>)
NOEC	1.6 mg/l (<i>Pseudokirchneriella subcapitata</i>) (72h)
	0.81 mg/l (<i>daphnia magna</i>) (48h)
	2.6 mg/l (<i>pimephales promelas</i>) (96h)
NOEC (aqua chron.)	0.498 mg/l (<i>daphnia magna</i>) (21d, QSAR)
	0.563 mg/l (fish) (30d, QSAR)

123-31-9 1,4-dihydroxybenzene

M Factor	10 (acute)
EC50/48h	0.13 mg/l (<i>daphnia magna</i>) (OECD 202)
EC50/72h	0.335 mg/l (<i>Pseudokirchneriella subcapitata</i>) (IUCLID)
EC50/0.5h	0.038 mg/l (bacteria) (IUCLID)
LC50/96h	0.044 mg/l (<i>oncorhynchus mykiss</i>)
	0.044 mg/l (<i>pimephales promelas</i>) (IUCLID)
NOEC	0.019 mg/l (<i>Pseudokirchneriella subcapitata</i>) (72h)
NOEC (aqua chron.)	0.0057 mg/l (<i>daphnia</i>) (21d)

· **12.2 Persistence and degradability****123-31-9 1,4-dihydroxybenzene**

Biodegradation 86 % (14 d, OECD 301 C)

· **12.3 Bioaccumulative potential****25013-15-4 vinyltoluene**

log Pow	3.58
log Kow	3.36
BCF	4.9 (fish)

123-31-9 1,4-dihydroxybenzene

log Pow	0.59
BCF	40

· **Behaviour in environmental systems:**· **12.4 Mobility in soil** No further relevant information available.· **Additional ecological information:**· **General notes:**

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.

· **12.5 Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

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· **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.

· **Waste disposal key:**

The waste codes given above are to be considered recommendations; because of regional and industrial sector specific features, application of different waste codes is possible.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA** UN1866

· **14.2 UN proper shipping name**

· **ADR** 1866 RESIN SOLUTION
· **IMDG, IATA** RESIN SOLUTION

· **14.3 Transport hazard class(es)**

· **ADR, IMDG, IATA**



· **Class** 3 Flammable liquids.
· **Label** 3

· **14.4 Packing group**

· **ADR, IMDG, IATA** III

· **14.5 Environmental hazards:**

· **Marine pollutant:** No

· **14.6 Special precautions for user**

· **Danger code (Kemler):** Warning: Flammable liquids.
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

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· Transport category	3
· Tunnel restriction code	D/E
· Remarks:	ADR 2.2.3.1.5 ≤ 450 l: -
<hr style="border-top: 1px dashed black;"/>	
· IMDG	
· 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
· Remarks:	IMDG-Code 2.3.2.5 ≤ 30 l: -

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category P5c FLAMMABLE LIQUIDS**
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations:**
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- **Other regulations, limitations and prohibitive regulations**
Adhere to the Ordinances on the Prohibition of Certain Chemicals.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H341 Suspected of causing genetic defects.
H351 Suspected of causing cancer.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
- **Classification according to Regulation (EC) No 1272/2008**
Flam. Liq.3, H226
Skin. Irrit.2, H315
- **Classification procedure**
Bridging principle "Substantially similar mixtures"
Calculation method

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Eye Irrit.2,H319

Calculation method

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- **Department issuing SDS:** Abteilung Labor

- **Contact:** Frau S. Schaller

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 2: Carcinogenicity – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

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

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