

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

Printing date 19.10.2018

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Revision: 19.10.2018

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

- **1.1 Product identifier**
 - **Trade name:** YACHTCARE ANTIFOULING PRIMER
 - **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** Antifouling paint
 - **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
-

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.

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GHS08 health hazard

STOT RE 2 H373 May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Inhalation.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

· **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



GHS08



GHS09

· **Signal word** Warning

· **Hazard-determining components of labelling:**

Solvent naphtha (petroleum), light arom.

Solvent naphtha (petroleum), medium aliph.

· **Hazard statements**

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

H373 May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Inhalation.

H411 Toxic to aquatic life with long lasting effects.

· **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.

P261 Avoid breathing mist/vapours/spray.

P273 Avoid release to the environment.

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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

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P403+P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

Contains Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700). 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 of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 64742-95-6 EINECS: 265-199-0 Reg.nr.: 01-2119455851-35	Solvent naphtha (petroleum), light arom. Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336	10- \leq 25%
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32	xylene, mixture of isomers Flam. Liq. 3, H226; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	10- \leq 25%
CAS: 100-41-4 EINECS: 202-849-4	ethylbenzene Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H332	3- \leq 5%
CAS: 64742-88-7 EINECS: 265-191-7	Solvent naphtha (petroleum), medium aliph. Flam. Liq. 3, H226; STOT RE 1, H372; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	1- \leq 3%
CAS: 25068-38-6 NLP: 500-033-5 Reg.nr.: 01-2119456619-26	Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700) Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	<1%
CAS: 108-88-3 EINECS: 203-625-9 Reg.nr.: 01-2119471310-51	toluene Flam. Liq. 2, H225; Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336	<1%
CAS: 40027-38-1 EINECS: 254-754-2	9-octadecenoic acid (z)-compd. with (Z)-N-octadec-9-enylpropane-1,3-diamine STOT RE 2, H373; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319	\leq 0.3%
CAS: 91845-13-5 EINECS: 295-184-4	Fatty acids, tall oil, compounds with (Z) -N-9-octadecenyl-1,3-propanediamine (2: 1) Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H302; Skin Irrit. 2, H315	\leq 0.3%

· **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:**
Personal protection for the First Aider.
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Remove person to fresh air and keep comfortable for breathing.
In case of unconsciousness place patient stably in side position for transportation.
Call a POISON CENTER/doctor if you feel unwell.
- **After skin contact:**
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Wash with plenty of soap and water.
Use skin protection cream for skin protection.
If skin irritation occurs: Get medical advice/attention.
- **After eye contact:**
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
- **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 or alcohol resistant foam.
- **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.
Wear fully protective suit.
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.
Do not inhale gases / fumes / aerosols.

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Ensure adequate ventilation

Keep away from ignition sources.

· **6.2 Environmental precautions:**

Avoid release to the environment.

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:**

Ensure adequate ventilation.

Collect with an inert, non-combustible, absorbent material (i.e. sand, diatomaceous earth, acid binder, universal binder).

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**

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Information about fire - and explosion protection:**

Vapours of the product are heavier than air and may accumulate on the ground, in mines, drains or cellars with higher concentration.

Fumes can combine with air to form an explosive mixture.

Use explosion-proof apparatus / fittings and spark-proof tools.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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.

Adhere to the provisions of the Law on Water Protection.

· **Information about storage in one common storage facility:**

Store away from oxidising agents.

Do not store together with acids.

Do not store together with alkalis (caustic solutions).

Keep away from foodstuffs, beverages and feed.

· **Further information about storage conditions:**

Store under lock and key and with access restricted to technical experts or their assistants only.

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.

Anti-explosion protection required

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· 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:

64742-95-6 Solvent naphtha (petroleum), light arom.OEL (EU) Short-term value: 120 mg/m³, 25 ppm**1330-20-7 xylene, mixture of isomers**WEL (Great Britain) Short-term value: 441 mg/m³, 100 ppm
Long-term value: 220 mg/m³, 50 ppm
Sk; BMGVIOELV (EU) Short-term value: 442 mg/m³, 100 ppm
Long-term value: 221 mg/m³, 50 ppm
Skin**100-41-4 ethylbenzene**WEL (Great Britain) Short-term value: 552 mg/m³, 125 ppm
Long-term value: 441 mg/m³, 100 ppm
SkIOELV (EU) Short-term value: 884 mg/m³, 200 ppm
Long-term value: 442 mg/m³, 100 ppm
Skin**64742-88-7 Solvent naphtha (petroleum), medium aliph.**TWA (EU) Long-term value: 145 mg/m³, 25 ppm**108-88-3 toluene**WEL (Great Britain) Short-term value: 384 mg/m³, 100 ppm
Long-term value: 191 mg/m³, 50 ppm
SkIOELV (EU) Short-term value: 384 mg/m³, 100 ppm
Long-term value: 192 mg/m³, 50 ppm
Skin

· DNELs

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	Long-term exposure - systemic effects	11 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	11 mg/kg bw/day (general population) 25 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	32 mg/m ³ (general population) 150 mg/m ³ (worker)

1330-20-7 xylene, mixture of isomers

Oral	Long-term exposure - systemic effects	1.6 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	108 mg/kg bw/day (general population) 180 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	14.8 mg/m ³ (general population)

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	Acute/short-term exposure - systemic effects	77 mg/m ³ (worker) 174 mg/m ³ (general population)
	Acute/short-term exposure - local effects	289 mg/m ³ (worker) 174 mg/m ³ (general population) 289 mg/m ³ (worker)

25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Oral	Acute/short-term exposure - systemic effects	0.75 mg/kg bw/day (general population)
	Long-term exposure - systemic effects	0.75 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	3,571 mg/kg bw/day (general population) 8.33 mg/kg bw/day (worker)
Inhalative	Acute/short-term exposure - systemic effects	8.33 mg/kg bw/day (worker)
	Long-term exposure - systemic effects	12.25 mg/m ³ (worker)
	Acute/short-term exposure - systemic effects	3,571 mg/m ³ (general population) 12.25 mg/m ³ (worker)

108-88-3 toluene

Oral	Long-term exposure - systemic effects	8.13 mg/kg bw/day (general population)
Dermal	Long-term exposure - systemic effects	226 mg/kg bw/day (general population) 384 mg/kg bw/day (worker)
Inhalative	Long-term exposure - systemic effects	56.5 mg/m ³ (general population) 192 mg/m ³ (worker)
	Acute/short-term exposure - systemic effects	226 mg/m ³ (general population) 384 mg/m ³ (worker)
	Acute/short-term exposure - local effects	226 mg/m ³ (general population) 384 mg/m ³ (worker)
	Long-term exposure - local effects	56.5 mg/m ³ (general population) 192 mg/m ³ (worker)

· PNECs

1330-20-7 xylene, mixture of isomers

PNEC aqua	327 mg/l (freshwater) 327 mg/l (marine water) 327 mg/l (intermittent releases)
PNEC sediment	12.46 mg/kg (freshwater) 12.46 mg/kg (marine water)

25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

PNEC aqua	0.006 mg/l (freshwater) 0.0006 mg/l (marine water) 0.018 mg/l (intermittent releases)
PNEC sediment	0.996 mg/kg (freshwater) 0.0996 mg/kg (marine water)
PNEC STP	10 mg/l

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PNEC soil	0.196 mg/kg (soil dw)
108-88-3 toluene	
PNEC aqua	0.68 mg/l (freshwater) 0.68 mg/l (marine water) 0.68 mg/l (intermittent releases)
PNEC sediment	16.39 mg/kg (freshwater) 16.39 mg/kg (marine water)
PNEC STP	13.61 mg/l
PNEC soil	2.89 mg/kg (soil dw)

· Ingredients with biological limit values:

1330-20-7 xylene, mixture of isomers

BMGV (Great Britain)	650 mmol/mol creatinine Medium: urine Sampling time: post shift Parameter: methyl hippuric acid
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· **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.
- Wash hands before breaks and at the end of work.
- Store protective clothing separately.
- Immediately remove all soiled and contaminated clothing
- Wash contaminated clothing before reuse.
- Avoid contact with the eyes and skin.
- Use skin protection cream for skin protection.

· Respiratory protection:

- 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.

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

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

- DIN EN 374
- Silver shield (TM) / Barrier / 4H-Gloves
- PVA gloves

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Fluorocarbon rubber (Viton)

Recommended thickness of the material: ≥ 0.7 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **As protection from splashes gloves made of the following materials are suitable:** Nitrile rubber, NBR

· **Not suitable are gloves made of the following materials:**

Natural rubber, NR

Butyl rubber, BR

Neoprene gloves

PVC gloves

· **Eye protection:**

DIN EN 166



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: Different according to colouring

· **Odour:** Solvent-like

· **pH-value:** Not determined

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: Undetermined.

· **Flash point:** 30 °C

· **Ignition temperature:** Not determined

· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

Lower: 0.3 Vol %

Upper: 7.6 Vol %

· **Vapour pressure at 20 °C:** 6.7 hPa

· **Density at 20 °C:** 1.2 g/cm³

· **Vapour density:** Not determined

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|--|--|
| · Solubility in / Miscibility with water: | Not miscible or difficult to mix. |
| · Partition coefficient: n-octanol/water: | Not determined |
| · Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No decomposition if used according to specifications.
- **10.2 Chemical stability** No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Reacts with oxidising agents.
Reacts with acids.
Reacts with reducing agents.
Reacts with organic substances.
- **10.4 Conditions to avoid**
Protect from heat.
Avoid naked flames, sparks, other ignition sources and sunlight.
- **10.5 Incompatible materials:**
Reacts with oxidising agents.
Reacts with acids.
Reacts with reducing agents.
Reacts with organic substances.
- **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:**

Dermal	ATE	7,866 mg/kg (mix) (Calculation method)
Inhalative	ATE	358 mg/l (mix) (4h / vapours ; Calculation method)

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD 50	>6,800 mg/kg (rat)
Dermal	LD 50	>3,400 mg/kg (rabbit)
Inhalative	LC 50 / 4h	>10.2 mg/l (rat)

1330-20-7 xylene, mixture of isomers

Oral	LD 50	>4,000 mg/kg (rat)
Dermal	LD 50	>1,700 mg/kg (rabbit)
Inhalative	LC 50 / 4h	21.7 mg/l (rat) (Vapour)

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100-41-4 ethylbenzene

Oral	LD50	3,500 mg/kg (rat)
Dermal	LD 50	>5,000 mg/kg (rabbit)
Inhalative	LC50 /4h	17.2 mg/l (rat)

64742-88-7 Solvent naphtha (petroleum), medium aliph.

Oral	LD 50	>6,500 mg/kg (rat)
Dermal	LD 50	>3,000 mg/kg (rab)
Inhalative	LC 50 / 4h	>14 mg/l (rat)

25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Oral	LD50	11,400 mg/kg (rat)
Dermal	LD50	20,000 mg/kg (rabbit)

108-88-3 toluene

Oral	LD 50	>5,000 mg/kg (rat)
Dermal	LD50	12,124 mg/kg (rabbit)
Inhalative	LC50 /4h	28.1 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.

· **Subacute to chronic toxicity:**

25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Oral	NOAEL (subacute)	50 mg/kg (OECD 408, 90d)
Dermal	NOEL	10 mg/kg (rat) (OECD 411, 90d)
	NOAEL (subchronic)	100 mg/kg (OECD 411, 90 d)

- **Additional toxicological information:**
May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Inhalation.
May cause respiratory irritation.
- **Sensitisation**
Sensitising effect by skin contact is possible by prolonged exposure.
Contains Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700), reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight 700 ≤ 1200). May produce an allergic reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

· **Reproductive toxicity/Fertility**

25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Oral	NOAEL (fertility)	750 mg/kg
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· Reproductive toxicity/Teratogenicity

25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

Oral	NOAEL (teratogenicity)	> 540 mg/kg (rat) (OECD 414 Prenatal Developmental Toxicity Study) 180 mg/kg (rabbit) (OECD 414 Prenatal Developmental Toxicity Study)
	NOAEL (developmental toxicity)	540 mg/kg (rat) (OECD 416, Two-Generation Study)

- **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. May cause drowsiness or dizziness.
- **STOT-repeated exposure**
May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Inhalation.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

64742-95-6 Solvent naphtha (petroleum), light arom.

EC50/48h	6.14 mg/l (daphnia magna)
EL50/72h	56 mg/l (Pseudokirchneriella subcapitata) (OECD 201)
LC50/96h	9.22 mg/l (oncorhynchus mykiss)
LL50/96h	10 mg/l (oncorhynchus mykiss) (OECD 203)
NOELR (aqua chron.)	2.6 mg/l (daphnia magna) (OECD 211, 21d) 2.6 mg/l (pimephales promelas) (OECD 204, 14d)

1330-20-7 xylene, mixture of isomers

EC50	>175 mg/l (activated slugde)
EC50/48h	3.82 mg/l (daphnia magna) 8.5 mg/l (palaemonetes pugio) (marine water)
EC50/72h	4.7 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	>780 mg/l (Cyprinus carpio) 13.1-16.5 mg/l (Lepomis macrochirus) 7.6 mg/l (oncorhynchus mykiss) 13.4 mg/l (pimephales promelas)
NOEC	>1.3 mg/l (oncorhynchus mykiss) (56 d)

100-41-4 ethylbenzene

EC50/48h	2.4 mg/l (daphnia magna) >5.2 mg/l (americamysis bahia)
EC50/72h	4.6 mg/l (Pseudokirchneriella subcapitata)

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LC50/96h	4.2 mg/l (oncorhynchus mykiss)
25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)	
EC50/48h	2.8 mg/l (daphnia magna) (OECD 202)
EC50/72h	9.4 mg/l (Selenastrum capricornutum)
EC50/3h	>100 mg/l (bacteria) (aerobic)
LC50/96h	3.6 mg/l (leuciscus idus)
	1.5 mg/l (oncorhynchus mykiss) (OECD 203)
NOEC	0.3 mg/l (daphnia magna) (OECD 211 21d)
108-88-3 toluene	
EC50/48h	11.5 mg/l (daphnia)
EC50/72h	12 mg/l (Pseudokirchneriella subcapitata)
EC50/3h	134 mg/l (algae)
LC50/96h	24 mg/l (oncorhynchus mykiss)
NOEC	29 mg/l (pseudomonas putida) (16h)
NOEC (aqua chron.)	0.74 mg/l (daphnia) (7d)
	1.39 mg/l (fish) (40d)

12.2 Persistence and degradability**64742-95-6 Solvent naphtha (petroleum), light arom.**

Biodegradation 74.3 % (ISO/DIS 14593, 28d)

1330-20-7 xylene, mixture of isomers

Biodegradation 87.8 % (28d)

100-41-4 ethylbenzene

Biodegradation >70 % (28 d)

25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

Biodegradation 5 % (OECD 301F, 28d)

108-88-3 toluene

BSB (BOD) 860 mg/g (5d)

Biodegradation 86 % (20d)

12.3 Bioaccumulative potential**64742-95-6 Solvent naphtha (petroleum), light arom.**

log Kow >3

BCF 10-2,500 (lit.) (calculated)

1330-20-7 xylene, mixture of isomers

log Pow >3

BCF 6-23.4 (oncorhynchus mykiss)

100-41-4 ethylbenzene

log Pow 3.1

25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

log Pow >2.981 (OECD 117, 25°C)

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BCF	31
108-88-3 toluene	
log Pow	2.73
BCF	90

· **Behaviour in environmental systems:**

· **12.4 Mobility in soil**

64742-95-6 Solvent naphtha (petroleum), light arom.

log Koc 2,36-1,783 (lit.) (calculated value)

Koc 60.7-229.2 (lit.) (calculated value)

100-41-4 ethylbenzene

log Koc 2.41

25068-38-6 Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight \leq 700)

Koc 445

· **Additional ecological information:**

· **General notes:**

Very toxic for aquatic organisms

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

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

· **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**

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.

· **European waste catalogue**

08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

15 01 10* packaging containing residues of or contaminated by dangerous substances

· **Uncleaned packaging:**

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

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA**

UN1263

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<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR · IMDG · IATA 	<p>1263 PAINT, ENVIRONMENTALLY HAZARDOUS PAINT (Solvent naphtha (petroleum), light arom., Naphtha (petroleum), hydrodesulfurized heavy), MARINE POLLUTANT PAINT</p>
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<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, IMDG 	<p>3 Flammable liquids.</p>
--	-----------------------------

<ul style="list-style-type: none"> · Class · Label 	<p>3</p>
--	----------

<ul style="list-style-type: none"> · IATA 	<p>3 Flammable liquids.</p>
--	-----------------------------



<ul style="list-style-type: none"> · Class · Label 	<p>3</p>
--	----------

<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	<p>III</p>
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<ul style="list-style-type: none"> · 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): 	<p>Product contains environmentally hazardous substances: zinc oxide, Solvent naphtha (petroleum), light arom. Symbol (fish and tree) Symbol (fish and tree)</p>
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<ul style="list-style-type: none"> · 14.6 Special precautions for user · Danger code (Kemler): · EMS Number: 	<p>Warning: Flammable liquids. 30 F-E, S-E</p>
---	--

<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 	<p>Not applicable.</p>
---	------------------------

<ul style="list-style-type: none"> · Transport/Additional information: · ADR · Limited quantities (LQ) · Transport category · Tunnel restriction code 	<p>5L 3 D/E</p>
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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.

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- **Seveso category**
E2 Hazardous to the Aquatic Environment
P5c FLAMMABLE LIQUIDS
- **REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction:** 3, 40
- **National regulations:**
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.
- **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.
- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- 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.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H361d Suspected of damaging the unborn child.
- H372 Causes damage to the central nervous system through prolonged or repeated exposure. Route of exposure: Inhalation.
- H373 May cause damage to the central nervous system and the hearing organs through prolonged or repeated exposure. Route of exposure: Inhalation.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

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

Flam. Liq. 3, H226

Skin. Irrit. 2, H315

STOT SE 3, H335

STOT SE 3, H336

STOT RE 2, H373

Aquatic Chronic 2, H411

- **Classification procedure**

Bridging principle "Substantially similar mixtures"

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

- **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

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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. 2: Flammable liquids – Category 2
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
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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

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