

Material Safety Data Sheet
According to 91/155 EEC

Printing date 19.03.2004

Reviewed on 17.01.2003

1 Identification of the substance/preparation and of the company/ undertaking





- Product details
- Trade name: Epifanes Poly-urethane Yacht Paint colours Component A (base)
- Application of the substance / the preparation
Polyurethane lacquer
Base of a high gloss two-component finish/paint
- Manufacturer/Supplier:
W.HEEREN & ZOON BV
Postbus 166
1430 AD Aalsmeer

tel. +31-297-360366
fax. +31-297-342078
- Further information obtainable from: Department Research & Development
- Information in case of emergency: See under Manufacturer/Supplier

2 Composition/information on ingredients

- Chemical characterization
- Description:
Resin mixture
Solvent mixture with pigment additives

- Dangerous components:

CAS: 1330-20-7 EINECS: 215-535-7	xylene  Xn; R 10-20/21-38	16.708%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate  Xi; R 10-36	12.266%
CAS: 100-41-4 EINECS: 202-849-4	ethylbenzene  Xn,  F; R 11-20	1.295%

- Additional information:
For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- Hazard description:



Xi Irritant

- Information concerning particular hazards for human and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
R 10 Flammable.
R 36 Irritating to eyes.
- Classification system:
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

4 First-aid measures

- After inhalation:
Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
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- After eye contact:
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.

5 Fire-fighting measures

- Suitable extinguishing agents:
CO₂, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents:
Water
Water with full jet
- Protective equipment: No special measures required.

6 Accidental release measures

- Person-related safety precautions:
Wear protective equipment. Keep unprotected persons away.
- Measures for environmental protection:
Do not allow to enter sewers/ surface or ground water.
- Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7 Handling and storage

- Handling:
- Information for safe handling: No special measures required.
- Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- Storage:
- Requirements to be met by storerooms and receptacles:
Store only in the original receptacle.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
Protect from heat and direct sunlight.

8 Exposure controls/personal protection

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

- Ingredients with limit values that require monitoring at the workplace:

19350-20-9: xylene

OES	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk
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108-65-6 2-methoxy-1-methylethyl acetate

OES	Short-term value: 548 mg/m ³ , 100 ppm Long-term value: 274 mg/m ³ , 50 ppm IOELV, Sk
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107-98-2 1-methoxy-2-propanol	
OES	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm IOELV, Sk
100-41-4 ethylbenzene	
OES	Short-term value: 552 mg/m ³ , 125 ppm Long-term value: 441 mg/m ³ , 100 ppm IOELV, Sk

- Additional information:
The lists valid during the making were used as basis.
- 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 eyes and skin.
- Respiratory protection: Not required.
- Protection of hands:
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
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 trough time has to be found out by the manufacturer of
the protective gloves and has to be observed.
- Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

• General Information

Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic

• Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	146°C

• Flash point: 44°C

• Ignition temperature: 315°C

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• Self-igniting:	Product is not selfigniting.
• Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
• Explosion limits:	
Lower:	1.1 Vol %
Upper:	10.8 Vol %
• Vapour pressure at 20°C:	6.7 hPa
• Density at 20°C:	1.3 g/cm ³
• Solubility in / Miscibility with water:	Not miscible or difficult to mix.
• Viscosity:	
Kinematic at 20°C:	+2.0 28 s (ISO 6 mm)
• Solvent content:	
Organic solvents:	33-36 %
• Solids content:	64-66 % (VB% 1h 150C)

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- Dangerous reactions No dangerous reactions known.
- Dangerous decomposition products:
No dangerous decomposition products known.

11 Toxicological information

- Acute toxicity:
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

12 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.

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13 Disposal considerations

- Product:
- Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
- Recommendation:
Disposal must be made according to official regulations.

14 Transport information

- Land transport ADR/RID (cross-border)



- ADR/RID class: 3 F1 Flammable liquids.
- Danger code (Kemler): 30
- UN-Number: 1263
- Packaging group: III
- Hazard label 3
- Description of goods: 1263 PAINT (not viscous)

- Maritime transport IMDG:



- IMDG Class: 3
- UN Number: 1263
- Label 3
- Packaging group: III
- EMS Number: F-E,S-E
- Marine pollutant: No
- Proper shipping name: PAINT

- Air transport ICAO-TI and IATA-DGR:



- ICAO/IATA Class: 3
- UN/ID Number: 1263
- Label 3
- Packaging group: III
- Proper shipping name: PAINT

15 Regulatory information

- Labelling according to EU guidelines:
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.
- Code letter and hazard designation of product:
Xi Irritant

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- Hazard-determining components of labelling:
xylene
- Risk phrases:
10 Flammable.
36 Irritating to eyes.
- Safety phrases:
2 Keep out of the reach of children.
25 Avoid contact with eyes.
46 If swallowed, seek medical advice immediately and show this container or label.
51 Use only in well-ventilated areas.
56 Dispose of this material and its container to hazardous or special waste collection point.
- National regulations:
- Technical instructions (air):

Class	Share in %
II	18.2
III	16.3

- Waterhazard class:
Water hazard class 2 (Self-assessment): hazardous for water.

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 R-phrases
10 Flammable.
11 Highly flammable.
20 Harmful by inhalation.
20/21 Harmful by inhalation and in contact with skin.
36 Irritating to eyes.
38 Irritating to skin.
- Department issuing MSDS: Department Research & Development
- Contact: T.J.H.M. van Steenes