

Epifanes Clear Gloss Varnish

Classic ultra high gloss yacht varnish, containing an ultra violet filter protecting the wood against discoloration. For use on bare wood and intact existing one- and two component varnishes both for the interior and exterior above the waterline. Suited for solid 'working' wood and plywood. This varnish is famous for its high gloss retention, long lasting properties, excellent outdoor durability, superior flowing characteristics and high build properties.

Type	Oxidative drying
Base	Phenolic resin / Alkyd resin / Tung Oil
Colour	Amber clear
Gloss	Ultra high gloss
Density	0.92 kg/dm ³
Viscosity	120-140 seconds Din Cup 4 mm.
Solids content	50 ± 2 vol.%

Drying times at 20°C. / 65% rah

Dustdry	Sandable	Recoatable
3 hours	24 hours	24 hours

Application

	Air spray	Brush
Vol.% thinner	15 - 20	0 - 5
Nozzle	1.2 - 1.5 mm	
Pressure (Bar)	2 - 3	
Viscosity Din Cup 4 mm	20 - 24 sec.	

Thinner

- spray application
- brush application

Epifanes Spraythinner for Paint & Varnish
Epifanes Brushthinner for Paint & Varnish

14 m² per liter @ 35 µm dryfilmthickness

Theoretical coverage
Practical coverage

Dependent on condition of substrate, loss of material due to factors such as application technique, shape of object, circumstances during application.

Recommended wft per coat
Application tips

60-70 µm (=30-35 µm dryfilmthickness)

Do not overbrush. Do not apply wet-in-wet. Do not apply excessive wet films to avoid the formation of curtains and drying problems.

Recommended system
- bare wood, brush application -

Coats	% Thinning	Drying	Abrasive paper :
1	50	24 hours	n.a.
1	25	24 hours	dry abrasive paper 220
1	15	24 hours	dry abrasive paper 220
4 or more	0-5	24 hours	wetordry abrasive paper 400

Recommended use

All woodwork of (seagoing) yachts above the waterline.
Interior and exterior

Substrate conditions

Bare wood, dry, degreased and sanded, percentage of humidity inside the wood < 15%. Well cleaned, degreased, sanded, intact well adhering one- and two-component varnish systems

Application conditions

Temperature of the varnish, object and surrounding area during application and drying should not be lower than 8°C. Relative air humidity should not exceed 85%.

Application guide lines

Avoid varnishing in direct sunlight or too much wind. A rapid loss of solvents will occur under these conditions and decrease the flowing ability. Use only soft, long bristled, clean and dry brushes of good quality.

Material Safety Data Sheet
According to 91/155 EEC

Printing date 19.03.2004

Reviewed on 27.08.2002

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

- Product details
- Trade name: Epifanes Clear Varnish
- Application of the substance / the preparation Lacquer
- 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

2 Composition/information on ingredients

- Chemical characterization
- Description:
Resin mixture
Solvent mixture with additives
Mixture of synthetic binders, additives and organic solvents

- Dangerous components:

CAS: 64742-48-9 EINECS: 265-150-3	Naphtha (petroleum), hydrotreated heavy ☒ Xn; R 10-65-66	41.793%
CAS: 1330-20-7 EINECS: 215-535-7	xylene ☒ Xn; R 10-20/21-38	2.024%

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

3 Hazards identification

- Hazard description: Not applicable.
- 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 66 Repeated exposure may cause skin dryness or cracking.
- 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

- General information:
Immediately remove any clothing soiled by the product.
- After inhalation:
Supply fresh air; consult doctor in case of complaints.
- 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.

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5 Fire-fighting measures

- Suitable extinguishing agents:
CO₂, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards caused by the substance, its products of combustion or resulting gases:
Formation of toxic gases is possible during heating or in case of fire.
Carbon monoxide (CO)
- Protective equipment: No special measures required.

6 Accidental release measures

- Person-related safety precautions:
Keep away from ignition sources.
Ensure adequate ventilation
- Measures for environmental protection:
Do not allow product to reach sewage system or any water course.
- Measures for cleaning/collecting:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Do not flush with water or aqueous cleansing agents
- Additional information: See Section 7 for information on safe handling.

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: None.

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: 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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- Additional information:
The lists valid during the making were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:
Wash hands before breaks and at the end of work.
- Respiratory protection: Not required.
- Protection of hands:
The glove material has to be impermeable and resistant to the product/
the substance/ the preparation.

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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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Safety glasses
- Body protection: Light weight protective clothing

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:	Undetermined.

• Flash point: 40°C (DIN 51755)

• Flammability (solid, gaseous): Flammable.

• Ignition temperature: 450°C

• 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:	0.6 Vol %
Upper:	7.0 Vol %

• Vapour pressure at 20°C: 1 hPa

• Density at 20°C: +-0.009 0.922 g/cm³

• Solubility in / Miscibility with water: Insoluble.

• Viscosity:

Kinematic at 20°C: +-1.5 40 s (DIN 53211/C6)

• Solvent content:

Organic solvents: +-1.5 43 %

• Solids content: +-1.5 57 % (SC% 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.

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- Dangerous decomposition products:
No dangerous decomposition products known.

11 Toxicological information

- Acute toxicity:

- LD/LC50 values relevant for classification:

64742-48-9 Naphtha (petroleum), hydrotreated heavy

Oral	LD50	>5000 mg/kg (rat)
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Dermal	LD50	>3000 mg/kg (rab)
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- Primary irritant effect:
- on the skin: No irritant effect.
- Sensitization: No sensitizing effects known.

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.

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.
- UN-Number: 1263
- Description of goods: 1263 PAINT

- Maritime transport IMDG:



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

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- Proper shipping name: PAINT
- Air transport ICAO-TI and IATA-DGR:



- 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.
- Hazard-determining components of labelling:
Naphtha (petroleum), hydrotreated heavy
- Risk phrases:
10 Flammable.
66 Repeated exposure may cause skin dryness or cracking.
- Safety phrases:
2 Keep out of the reach of children.
7 Keep container tightly closed.
16 Keep away from sources of ignition - No smoking.
23 Do not breathe fumes/aerosol.
24 Avoid contact with skin.
46 If swallowed, seek medical advice immediately and show this container or label.
51 Use only in well-ventilated areas.
- Special labelling of certain preparations:
Contains 2-butanone oxime. May produce an allergic reaction.
- National regulations:
- Technical instructions (air):

Class	Share in %
II	2.4
III	0.5
- 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.
20/21 Harmful by inhalation and in contact with skin.
38 Irritating to skin.
65 Harmful: may cause lung damage if swallowed.
66 Repeated exposure may cause skin dryness or cracking.

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- Department issuing MSDS: Department Research & Development
- Contact: T.J.H.M. van Steenes

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