

# Epifanes Yacht Enamel

Classic Yacht Enamel for interior and exterior use on wood, steel fibreglass and aluminium above the waterline in conjunction with the appropriate primers. Provides excellent flow, wet edge and covering properties. Vivid colour brilliance. Outstanding gloss, weather durability and gloss retention. Sweet- and salt water resistant

Type	Air drying																				
Base	Oil modified alkyd resins.																				
Colour	Standard range of colours according to Epifanes colour chart.																				
Gloss	Ultra high gloss																				
Density	0.95 - 1.30 kg/dm <sup>3</sup> ( dependent on colour )																				
Viscosity	40 seconds Din Cup 6 mm.																				
Solids content	50 - 55 ± 2 vol.% ( dependent on colour )																				
Drying times at 20°C. / 65% RAH	dust dry after 3 hours, recoatable after 24 hours																				
Application	<table border="1"> <thead> <tr> <th></th> <th>Airless spray</th> <th>Conv. air spray</th> <th>Brush/roller</th> </tr> </thead> <tbody> <tr> <td>Vol.% thinner</td> <td>5 - 10</td> <td>15 - 20</td> <td>0 - 5</td> </tr> <tr> <td>Nozzle</td> <td>0.011" - 0.013"</td> <td>1.5 - 1.8 mm</td> <td></td> </tr> <tr> <td>Pressure ( Bar )</td> <td>80 - 100</td> <td>2 - 3</td> <td></td> </tr> <tr> <td>Visc. Din Cup 4mm</td> <td>35 - 50</td> <td>20 - 24</td> <td>120</td> </tr> </tbody> </table>		Airless spray	Conv. air spray	Brush/roller	Vol.% thinner	5 - 10	15 - 20	0 - 5	Nozzle	0.011" - 0.013"	1.5 - 1.8 mm		Pressure ( Bar )	80 - 100	2 - 3		Visc. Din Cup 4mm	35 - 50	20 - 24	120
	Airless spray	Conv. air spray	Brush/roller																		
Vol.% thinner	5 - 10	15 - 20	0 - 5																		
Nozzle	0.011" - 0.013"	1.5 - 1.8 mm																			
Pressure ( Bar )	80 - 100	2 - 3																			
Visc. Din Cup 4mm	35 - 50	20 - 24	120																		
Thinner																					
- spray application	Epifanes Spraythinner for Paint & Varnish																				
- brush/roller application	Epifanes Brushthinner for Paint & Varnish																				
Theoretical coverage	15 m <sup>2</sup> per litre @ 40 µm dryfilmthickness																				
Practicle coverage	Dependent on application methode, kind and condition of substrate, loss of material due to shape of object, circumstances during application, etc.																				
Recommended wetfilmthickness	70 - 80 µm, ( = 35 - 40 µm dryfilmthickness )																				
Application	Do not apply wet-on-wet and do not apply excessive wet films in order to avoid the formation of curtains and drying problems.																				
Sanding	<u>Lightly sand between coats with wetordry abrasive apasper nr. 400</u>																				
Recommended primers	<table border="1"> <tbody> <tr> <td>Wood</td> <td>Werdol Woodprimer</td> </tr> <tr> <td>Steel</td> <td>Werdol Metalprimer</td> </tr> <tr> <td>Fibreglass</td> <td>Epifanes Fibrerglass Primer</td> </tr> <tr> <td>Aluminium</td> <td>Epifanes Washprimer AQ + Epigrond Prelacquer</td> </tr> </tbody> </table>	Wood	Werdol Woodprimer	Steel	Werdol Metalprimer	Fibreglass	Epifanes Fibrerglass Primer	Aluminium	Epifanes Washprimer AQ + Epigrond Prelacquer												
Wood	Werdol Woodprimer																				
Steel	Werdol Metalprimer																				
Fibreglass	Epifanes Fibrerglass Primer																				
Aluminium	Epifanes Washprimer AQ + Epigrond Prelacquer																				
Substrate conditions																					
- primer coats	Remove all salt and other water soluble dirt with fresh water. Remove grease and oil with water and ammonium solution or Epifanes Spraythinner for Paint and Varnish.																				
- existing coats																					
Application guide lines	Before applying, stir thoroughly. The application and drying should occur in well ventilated areas. Always secure sufficient air circulation for supply of fresh air and disposal of solvent fumes and in order to avoid health hazards and drying problems. Avoid painting in direct sunlight or too much wind. A rapid loss of solvents will occur under these conditions and decrease the flowing ability.																				
Application conditions	Temperature of paint, object and work area during application and drying should not be lower than 5°C. Relative air humidity should not exceed 85%. Temperature of object during and drying should be at least 3°C above dew point.																				

**Material Safety Data Sheet**  
According to 91/155 EEC

Printing date 19.03.2004

Reviewed on 18.03.2003


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

- Product details
- Trade name: Epifanes Yacht Enamel                      All colours
- Application of the substance / the preparation  
Paint  
One component high gloss traditional yachtpaint
- 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  
Mixture of synthetic binders, pigments, additives and organic solvents

#### • Dangerous components:

CAS: 64742-48-9	Naphtha (petroleum), hydrotreated heavy	26.994%
EINECS: 265-150-3	 Xn; R 10-65-66	

- 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

- 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.

(Contd. on page<sup>G2</sup>)

**Material Safety Data Sheet**  
According to 91/155 EEC

Printing date 19.03.2004

Reviewed on 18.03.2003

Trade name: Epifanes Yacht Enamel

All colours

(Contd. of page 1)

**5 Fire-fighting measures**

- Suitable extinguishing agents:  
CO<sub>2</sub>, 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: Ensure adequate ventilation
- 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).  
Do not flush with water or aqueous cleansing agents

**7 Handling and storage**

- Handling:
- Information for safe handling: Use only in well ventilated areas.
- 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:  
No special requirements.
- 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:  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- 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.  
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

(Contd. on page 3)

## Material Safety Data Sheet

According to 91/155 EEC

Printing date 19.03.2004

Reviewed on 18.03.2003

Trade name: Epifanes Yacht Enamel

All colours

(Contd. of page 2)

- 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

**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:	niet bepaald °C

• Flash point: &gt; 36°C

• Ignition temperature: 240°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: 1.25 g/cm<sup>3</sup> (ISO 2811)

• Solubility in / Miscibility with water: Insoluble.

## • Viscosity:

Kinematic at 20°C: 40 s (ISO 6 mm)

## • Solvent content:

Organic solvents: 29.1 %

• Solids content: 70.9 % (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: Flammable gases/vapours

(Contd. on page 4)

**Material Safety Data Sheet**  
According to 91/155 EEC

Printing date 19.03.2004

Reviewed on 18.03.2003

Trade name: Epifanes Yacht Enamel

All colours

(Contd. of page 3)

**11 Toxicological information**

- Acute toxicity:

- LD/LC50 values relevant for classification:

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

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>3000 mg/kg (rab)

- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.

**12 Ecological information**

- General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it 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.
- Recommended cleansing agents: Solvent naphtha

**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

(Contd. on page 5)

**Material Safety Data Sheet**  
According to 91/155 EEC

Printing date 19.03.2004

Reviewed on 18.03.2003

Trade name: Epifanes Yacht Enamel

All colours

(Contd. of page 4)

- 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.
- 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.  
20 When using do not eat or drink.  
28 After contact with skin, wash immediately with plenty of soap and water.  
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- Special labelling of certain preparations:  
Contains 2-butanone oxime. May produce an allergic reaction.
- National regulations:
- Technical instructions (air):

Class	Share in %
II	0.8
III	0.3

- Waterhazard class:  
Water hazard class 1 (Self-assessment): slightly 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.  
65 Harmful: may cause lung damage if swallowed.  
66 Repeated exposure may cause skin dryness or cracking.
- Department issuing MSDS: Department Research & Development
- Contact: T.J.H.M. van Steenes