















**1 Identification of the substance/mixture and of the company/undertaking**

- Product identifier
- Trade name: Epifanes Clear Gloss Varnish
- Application of the substance / the preparation  
Lacquer solvent/ Varnish thinner  
classic high gloss marine varnish
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:  
W.Heeren & Zoon bv.  
P.O. box 166  
1430 AD Aalsmeer  
Netherlands  
tel.+31-(0)297-360366  
fax +31-(0)297-342078  
email: r&d@epifanes.nl
- Information department: environment protection department
- Emergency telephone number: Heeren & Zoon b.v. 0297360366

**2 Composition/information on ingredients**

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











· Dangerous components:

64742-48-9	naphta (petroleum), hydrotreated heavy  Xn R65 R10-66  H226  H304	25-50%
1330-20-7	xylene  Xn R20/21  Xi R38 R10  H226  H312; H332; H315	≤ 2.5%
127519-17-9	A mixture of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethyl-ethyl)-4-hydroxyphenyl]propionates  N R51/53  H411	≤ 2.5%
96-29-7	2-butanone oxime  Xn R21-40  Xi R41-43 Carc. Cat. 3  H351  H318  H312; H317	≤ 2.5%

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98-54-4	4-tert-butylphenol  Xi R36/37/38  N R51/53  H314  H411  H319; H335  H303; H313; H401	≤ 2.5%
136-52-7	cobalt bis(2-ethylhexanoate)  Xn R22  N R50/53  H301  H400; H410	≤ 2.5%

Additional information:

For the wording of the listed risk phrases refer to section 16.

**3 Hazards identification**

Classification of the substance or mixture



GHS02 Flame

H226 Flammable liquid and vapour.

H333 May be harmful if inhaled.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

R10-66: Flammable. Repeated exposure may cause skin dryness or cracking.

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.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements

Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product has been classified and marked in accordance with directives on hazardous materials.

Risk phrases:

10 Flammable.

66 Repeated exposure may cause skin dryness or cracking.

Safety phrases:

2 Keep out of the reach of children.

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.

56 Dispose of this material and its container to hazardous or special waste collection point.

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- Special labelling of certain preparations:  
Contains 2-butanone oxime, cobalt carboxylate. May produce an allergic reaction.
- Classification system:
- NFPA ratings (scale 0 - 4)



Health = 0  
Fire = 2  
Reactivity = 0

- HMIS-ratings (scale 0 - 4)



Health = 0  
Fire = 2  
Reactivity = 0

#### 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.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: If symptoms persist consult doctor.

#### 5 Firefighting measures

- Suitable extinguishing agents:  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture  
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

- Personal precautions, protective equipment and emergency procedures  
Keep away from ignition sources  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:  
Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Ensure adequate ventilation.
- 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.

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## 7 Handling and storage

- Handling:
- Precautions for safe handling  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- Information about protection against explosions and fires:  
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: Keep receptacle tightly sealed.
- Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

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

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

1330-20-7 xylene

PEL	435 mg/m <sup>3</sup> , 100 ppm
REL	Short-term value: 655 mg/m <sup>3</sup> , 150 ppm Long-term value: 435 mg/m <sup>3</sup> , 100 ppm
TLV	Short-term value: 651 mg/m <sup>3</sup> , 150 ppm Long-term value: 434 mg/m <sup>3</sup> , 100 ppm
BEI	

- Additional information:  
The lists that were valid during the creation were used as basis.
- Personal protective equipment:
- General protective and hygienic measures:  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.
- Breathing equipment:  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- 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

- Material of gloves

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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

- Body protection: Light weight protective clothing

**9 Physical and chemical properties**

· General Information	
· Appearance:	
Form:	Fluid
Color:	According to product specification
· Odor: Characteristic	
· Odour threshold: Not determined.	
· pH-value: Not determined.	
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	150°C (302 °F)
· Flash point: 38°C (100 °F) (DIN 51755)	
· Flammability (solid, gaseous): Not applicable.	
· Ignition temperature: 240°C (464 °F)	
· Decomposition temperature: Not determined.	
· Auto igniting: Product is not selfigniting.	
· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
· Explosion limits:	
Lower:	0.6 Vol %
Upper:	7.0 Vol %
· Vapor pressure at 20°C (68 °F): 1 hPa (1 mm Hg)	
· Density at 20°C (68 °F): 0.918 g/cm <sup>3</sup> (7.661 lbs/gal)	
· Relative density: Not determined.	
· Vapour density: Not determined.	
· Evaporation rate: Not determined.	
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
· Segregation coefficient (n-octanol/water): Not determined.	

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- |                            |  |
|----------------------------|--|
| · Viscosity:               |  |
| Dynamic:                   | Not determined.                            |
| Kinematic at 20°C (68 °F): | 50 s (ISO 6 mm)                            |
| · Solvent content:         |  |
| Organic solvents:          | 38.0 %                                     |
| VOC content:               | 38.0 %                                     |
|                            | VOC content:                               |
|                            | 382.8 g/l / 3.19 lb/gl                     |
| Solids content:            | 62.0 % (SC% 1h 150C)                       |
| · Other information        | No further relevant information available. |

**10 Stability and reactivity**

- Thermal decomposition / conditions to be avoided:  
No decomposition if used according to specifications.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

**11 Toxicological information**

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

**12 Ecological information**

- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behavior in environmental systems:
- Bioaccumulative potential No further relevant information available.
- Additional ecological information:
- General notes:  
Water hazard class 1 (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**

- Waste treatment methods
- Recommendation:  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

USA

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**14 Transport information**

· UN-Number	
· DOT	UN1263
· ADR, IMDG, IATA	1263
· UN proper shipping name	
· DOT, IMDG	PAINT
· ADR	CONSUMER COMMODITY, ORM-D
· IATA	1263 PAINT
· ADR	PAINT
· Transport hazard class(es)	
· DOT, IATA	
· Class	3 Flammable liquids.
· Label	3
· ADR	
· Class	3 (F1) Flammable liquids
· Label	3
· IMDG	
· Class	Void
· Label	3
· Packing group	
· DOT, ADR, IMDG, IATA	III
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
· Danger code (Kemler):	30
· EMS Number:	F-E, S-E
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Remarks:	CERCLA/DOT RQ: 617gal./4786 lbs.
· IMDG	
· Remarks:	System Reference Code:5
· UN "Model Regulation":	UN1263, PAINT, 3, III

**15 Regulatory information**

· Sara	
· Section 355 (extremely hazardous substances):	
	None of the ingredient is listed.
· Section 313 (Specific toxic chemical listings):	
1330-20-7	xylene
100-41-4	ethylbenzene
· TSCA (Toxic Substances Control Act):	
1330-20-7	xylene

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Material Safety Data Sheet  
acc. to ISO/DIS 11014

Printing date 08/29/2011

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80-46-6	p-(1,1-dimethylpropyl)phenol
127519-17-9	A mixture of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethyl-ethyl)-4-hydroxyphenyl] propionates
68409-80-3	Isomeren van vetzuren calciumzouten, C6-C19 Isomers from fatty acid salts
22464-99-9	Zirconiumoctoate, 12 % Zr
96-29-7	2-butanone oxime
100-41-4	ethylbenzene
108-83-8	2,6-dimethylheptan-4-one
140-66-9	4-(1,1,3,3-tetramethylbutyl)phenol
98-54-4	4-tert-butylphenol
136-52-7	cobalt bis(2-ethylhexanoate)
112-34-5	2-(2-butoxyethoxy)ethanol

· Proposition 65

· Chemicals known to cause cancer:

100-41-4	ethylbenzene
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· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

1330-20-7	xylene	I
100-41-4	ethylbenzene	D

· IARC (International Agency for Research on Cancer)

1330-20-7	xylene	3
100-41-4	ethylbenzene	2B
136-52-7	cobalt bis(2-ethylhexanoate)	2B

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

1330-20-7	xylene	A4
100-41-4	ethylbenzene	A3

· MAK (German Maximum Workplace Concentration)

96-29-7	2-butanone oxime	2
100-41-4	ethylbenzene	3A

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

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Printing date 08/29/2011

Reviewed on 08/29/2011

Trade name: Epifanes Clear Gloss Varnish

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- National regulations:
- Technical instructions (air):

Class	Share in %
I	≤ 2,5
NK	25-50

- Water hazard 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.

- Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organization  
ACGIH: American Conference of Governmental Industrial Hygienists  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
VOC: Volatile Organic Compounds (USA, EU)

- \* Data compared to the previous version altered.