

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

- 1.1 Product identifier
- Trade name: Epifanes Nautiforte Yacht Paint
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Product category PC9a Coatings and paints, thinners, paint removers
- Process category PROC10 Roller application or brushing
- Environmental release category ERC2 Formulation into mixture
- Application of the substance / the mixture
Paint
See our technical datasheet for application of this product.
- 1.3 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
- Further information obtainable from: Research & Development.
- 1.4 Emergency telephone number:
W.Heeren & Zoon bv. tel: +31 297 360678, E-mail: rend@epifanes.nl
Office hours: weekdays from 08:00 to 17:00.
The National Poisons Information Service; dial 111
Solely intended to inform professionals in acute poisoning!
See under Manufacturer/Supplier

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.

- 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

- Signal word Warning
- Hazard statements
H226 Flammable liquid and vapour.
- Precautionary statements
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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- P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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:

EUH066 Repeated exposure may cause skin dryness or cracking.
Contains cobaltbis(2-ethylhexanoat), 2-butanone oxime. May cause 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:
Resin mixture
Solvent mixture with pigment additives

Dangerous components:

CAS: 64742-48-9 EINECS: 265-150-3 Index number: 649-327-00-6 Reg.nr.: 01-2119463258-33	Naphtha (petroleum), hydrotreated heavy Flam. Liq. 3, H226 Asp. Tox. 1, H304	10-25%
CAS: 96-29-7 EINECS: 202-496-6 Index number: 616-014-00-0 Reg.nr.: 01-2119539477-28	2-butanone oxime Carc. 2, H351 Eye Dam. 1, H318 Acute Tox. 4, H312; Skin Sens. 1, H317	≤0.5%
CAS: 136-52-7 EINECS: 205-250-6 Reg.nr.: 01-2119524678-29	cobalt bis(2-ethylhexanoate) Repr. 2, H361 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Skin Sens. 1, H317	<0.3%

Additional information:

Note P: The substance does not have to be classified as a carcinogen or mutagen as can be shown that the substance contains less than 0.1% (w / w) benzene (EINECS No 200-753-7.). This note applies only to certain complex oil-derived substances in Part 3.

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

SECTION 4: First aid measures

- 4.1 Description of 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.
- 4.2 Most important symptoms and effects, both acute and delayed
Dizziness
Breathing difficulty

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- 4.3 Indication of any immediate medical attention and special treatment needed
If swallowed, gastric irrigation with added, activated carbon.

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
No further relevant information available.
- 5.3 Advice for firefighters
- Protective equipment: No special measures required.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation
Keep away from ignition sources.
Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions:
Prevent seepage into sewage system, workpits and cellars.
Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- 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
No special precautions are necessary if used correctly.
- Information about fire - and explosion protection:
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- 7.2 Conditions for safe storage, including any incompatibilities
- 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:
Store in dry conditions.
Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

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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:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

136-52-7 cobalt bis(2-ethylhexanoate)

WEL	Long-term value: 0.1 mg/m ³ as Co; Carc, Sen
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- DNELs

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

Dermal	Long-term - systemic effects, worker	300 mg/kg bw/day (Werker/Worker)
Inhalative	Long-term - systemic effects, worker	1500mg/m ³ (Werker/Worker)

96-29-7 2-butanone oxime

Inhalative	Acute - systemic effects, worker	320-1000 mg/m ³ (Fish Acute Toxicity Study)
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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:
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
- 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.
- For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:
Synthetic rubber gloves
- For the permanent contact gloves made of the following materials are suitable:
Synthetic rubber gloves
nitrile rubber;
recommended glove thickness> 0.45mm. permeability / permeation time:> 480 min. according to EN 374.
- For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:
Natural rubber, NR

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- As protection from splashes gloves made of the following materials are suitable:
Cloropene; handglove thickness >0.7mm, penetration time >60min. according EN374.
Nitrilrubber; handglove thickness >0.3mm, penetration time >60min. according EN374.
- Not suitable are gloves made of the following materials:
Strong material gloves
Leather gloves
- Eye protection:



Tightly sealed goggles

- Body protection: Solvent resistant protective clothing

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- General Information
- Appearance:

Form:	Fluid
Colour:	According to product specification
Odour:	Characteristic
Odour threshold:	Not determined.
- pH-value: Not determined.
- Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	150 °C
- Flash point: >40 °C
- Flammability (solid, gas): Not applicable.
- Ignition temperature: 240 °C
- Decomposition temperature: Not determined.
- Auto-ignition temperature: Product is not selfigniting.
- Explosive properties: 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: 1.2 g/cm³
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: 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 at 20 °C: | 35 s (ISO 6 mm) |
| · Solvent content: | |
| Organic solvents: | 26.0 % |
| VOC content: | 26.0 % |
| | VOC content: |
| | 312.5 g/l / 2.61 lb/gal |
| Solids content: | 71.2 % (VB% 1h 150C) |
| · 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:
No dangerous decomposition products known.

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:

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

Oral	LD50	>5000 mg/kg bw (rat)
Dermal	LD50	>5000 mg/kg bw (rabbit) ((24h))
Inhalative	LC50	>5000 mg/m ³ (vapour) (rat) ((8h))

96-29-7 2-butanone oxime

Oral	LD50	3700 mg/kg bw (rat)
Dermal	LD50	200-2000 mg/kg bw (rat)
Inhalative	LC50/4 h	20 mg/l (rat)

136-52-7 cobalt bis(2-ethylhexanoate)

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50 (Konijn)	5000 mg/kg (rabbit)

- Primary irritant effect:
- Skin corrosion/irritation
Based on available data, the classification criteria are not met.

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- Serious eye damage/irritation
Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation
Based on available data, the classification criteria are not met.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- 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
Based on available data, the classification criteria are not met.
- STOT-repeated exposure
Based on available data, the classification criteria are not met.
- Aspiration hazard
Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

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

ErL (72h)	>1000 mg/l (Pseudokirchneriella subcapitata-OECD 201)
EL50 (48h)	>1000 mg/l ((Daphnia magna-OECD 202))
LL50 (96h)	>1000 mg/l ((Onorhynchus mykiss OECD 203))
EbL50 (72h)	>1000 mg/l (Pseudokirchneriella subcapitata-OECD 201)
NOELR (72h)	3 mg/l ((Pseudo. subcapitata-biomass-OECD 201)) 100 mg/l ((Pseudo. subcap. growth rate OECD 201))

96-29-7 2-butanone oxime

LC50 (96 hours)	320-1000 mg/l (fish 1) (LEUCISCUS IDUS; STATISCH SYSTEM) 48 mg/l (fish 2) (LEPOSMIS MACEOCHIRUS; STATISCH SYSTEM)
LC50 (48 hours)	750 mg/l (other waterspecies 1)
EC50 (48 hours)	500 mg/l (daphnia magna) 750 mg/l (Daphnia similis Acute Toxicity Study) (DAPHNIA MAGNA)
EC50 (72 hours)	83 mg/l (other waterspecies 2) (SCENEDESMUS SUBSPICATUS)
EC50	630 mg/l (other waterspecies 1) (BACTERIA; TOXICITEITSTEST)

136-52-7 cobalt bis(2-ethylhexanoate)

LC50	0.1-1 mg/l (Fish Acute Toxicity Study)
EC50	0.1-1 mg/l (daphnia magna)
EC50	0.1-1 mg/l (Algae, Growth inhibition test)

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential Non significant accumulation in organisms
- 12.4 Mobility in soil No further relevant information available.
- Ecotoxicological effects:
- Remark: Harmless to algae up to the tested concentration.
- Additional 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.

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- Danger to drinking water if even 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.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agents: Solvent naphtha

SECTION 14: Transport information

- 14.1 UN-Number
- ADR, IMDG, IATA UN1263
- 14.2 UN proper shipping name
- ADR 1263 PAINT (not viscous)
- IMDG, IATA PAINT
- 14.3 Transport hazard class(es)
- ADR
- 
- Class 3 (F1) Flammable liquids.
- Label 3
- IMDG, IATA
- 
- Class 3 Flammable liquids.
- Label 3
- 14.4 Packing group
- ADR, IMDG, IATA III
- 14.5 Environmental hazards:
- Marine pollutant: No
- 14.6 Special precautions for user Warning: Flammable liquids.
- Danger code (Kemler): 30
- EMS Number: F-E, S-E
- Stowage Category A
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

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• Transport/Additional information:

• ADR

- Limited quantities (LQ)
- Excepted quantities (EQ)

5L

Code: E1

Maximum net quantity per inner packaging:
30 ml

Maximum net quantity per outer packaging:
1000 ml

• Transport category

3

• Tunnel restriction code

D/E

• IMDG

- Limited quantities (LQ)
- Excepted quantities (EQ)

5L

Code: E1

Maximum net quantity per inner packaging:
30 ml

Maximum net quantity per outer packaging:
1000 ml

• UN "Model Regulation":

UN 1263 PAINT (NOT VISCOUS), 3, III

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.
- Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- National regulations:
- Technical instructions (air):

Class	Share in %
I	≤0.5
NK	25-50

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

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H317 May cause an allergic skin reaction.

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H318 Causes serious eye damage.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

• 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)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

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

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)

VOC: Volatile Organic Compounds (USA, EU)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids - Category 3

Acute Tox. 4: Acute toxicity - Category 4

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Skin Sens. 1: Skin sensitisation - Category 1

Carc. 2: Carcinogenicity - Category 2

Repr. 2: Reproductive toxicity - Category 2

Asp. Tox. 1: Aspiration hazard - Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

• * Data compared to the previous version altered.

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Trade name: Epifanes Nautiforte Yacht Paint

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Annex: Exposure scenario

- Short title of the exposure scenario
- Product category PC9a Coatings and paints, thinners, paint removers
- Process category PROC10 Roller application or brushing
- Environmental release category ERC2 Formulation into mixture
- Description of the activities / processes covered in the Exposure Scenario
See section 1 of the annex to the Safety Data Sheet.
- Conditions of use
- Duration and frequency 5 workdays/week.
- Physical parameters
- Physical state Fluid
- Concentration of the substance in the mixture The substance is main component.
- Other operational conditions
- Other operational conditions affecting environmental exposure
No special measures required.
- Other operational conditions affecting worker exposure
Take precautionary measures against static discharge.
Keep away from sources of ignition - No smoking.
- Other operational conditions affecting consumer exposure
Keep out of the reach of children.
- Other operational conditions affecting consumer exposure during the use of the product
Not applicable.
- Risk management measures
- Worker protection
- Organisational protective measures No special measures required.
- Technical protective measures
No special measures required.
Provide explosion-proof electrical equipment.
- Personal protective measures
Do not inhale gases / fumes / aerosols.
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
- Measures for consumer protection
Ensure adequate labelling.
Keep locked up and out of the reach of children.
- Environmental protection measures
- Water No special measures required.
- Disposal measures Ensure that waste is collected and contained.
- Disposal procedures
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Waste type Partially emptied and uncleaned packaging
- Exposure estimation
- Consumer Not relevant for this Exposure Scenario.
- Guidance for downstream users No further relevant information available.