

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

- Product details
- Trade name: Epifanes PP Varnish extra Component A (base)
- Application of the substance / the preparation  
Base component of a high build two-component clear varnish
- Manufacturer/Supplier:  
W.Heeren & Zoon BV  
P.O. Box 166  
Netherlands  
Phone:(++31)297 360366  
Fax :(++31)297 342078
- Further information obtainable from: Environment protection department.

**2 Composition/information on ingredients**

- Chemical characterization
- Description: Mixture of substances listed below with nonhazardous additions.

• Dangerous components:

CAS: 1330-20-7 EINECS: 215-535-7	xylene Xn, Xi; R 10-20/21-38	10-25%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. Xn, Xi, N; R 10-37-51/53-65-66	10-25%
CAS: 108-10-1 EINECS: 203-550-1	4-methylpentan-2-one Xn, Xi, F; R 11-20-36/37-66	2.5-10%
CAS: 100-41-4 EINECS: 202-849-4	ethylbenzene Xn, F; R 11-20	2.5-10%
CAS: 77-58-7 EINECS: 201-039-8	dibutyltin dilaurate Xn, Xi, N; R 21/22-36/38-48-50/53	≤ 2.5%

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

**3 Hazards identification**

- Hazard description:  
Xn Harmful
- 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 20/21 Harmful by inhalation and in contact with skin.  
R 38 Irritating to skin.  
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R 65 Harmful: may cause lung damage if swallowed.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

Trade name: Epifanes PP Varnish extra Component A (base)

(Contd. of page 1)

**4 First-aid measures**

- **General information:**  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness place patient stably in side position for transportation.
- **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.

**5 Fire-fighting measures**

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** Mouth respiratory protective device.

**6 Accidental release measures**

- **Person-related safety precautions:**  
Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Inform respective authorities in case of seepage into water course or sewage system.  
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).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.

**7 Handling and storage**

- **Handling:**
- **Information for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **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:** Keep container tightly sealed.

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(Contd. on page 3)

Trade name: Epifanes PP Varnish extra Component A (base)

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**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:

1330-20-7 xylene

WEL	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV
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108-10-1 4-methylpentan-2-one

WEL	Short-term value: 416 mg/m <sup>3</sup> , 100 ppm Long-term value: 208 mg/m <sup>3</sup> , 50 ppm Sk
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100-41-4 ethylbenzene

WEL	Short-term value: 552 mg/m <sup>3</sup> , 125 ppm Long-term value: 441 mg/m <sup>3</sup> , 100 ppm
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77-58-7 dibutyltin dilaurate

WEL	Short-term value: 0.2 mg/m <sup>3</sup> Long-term value: 0.1 mg/m <sup>3</sup> as Sn; 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:  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- Respiratory protection:  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- 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  
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: Tightly sealed goggles

Trade name: Epifanes PP Varnish extra Component A (base)

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## 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:	139°C

### • Flash point:

28°C

### • 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:	0.7 Vol %
Upper:	7.5 Vol %

### • Vapour pressure at 20°C:

6.7 hPa

### • Density at 20°C:

1.03087 g/cm<sup>3</sup>

### • Solubility in / Miscibility with water:

Not miscible or difficult to mix.

### • Solvent content:

Organic solvents:	41.5 %
VOC content:	41.5 %
	427.8 g/l / 3.57 lb/gl

### • Solids content:

58.5 %

## 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:

#### • LD/LC50 values relevant for classification:

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

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Trade name: Epifanes PP Varnish extra Component A (base)

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77-58-7 dibutyltin dilaurate

Oral	LD50	175 mg/kg (rat)
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- Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: No 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:  
Harmful  
Irritant

**12 Ecological information**

- Ecotoxicological effects:
- Remark: Harmful to fish
- 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.  
Harmful to aquatic organisms

**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 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

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Trade name: Epifanes PP Varnish extra Component A (base)

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- 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:



Xn Harmful

- Hazard-determining components of labelling:  
Solvent naphtha (petroleum), light arom.  
xylene
- Risk phrases:  
10 Flammable.  
20/21 Harmful by inhalation and in contact with skin.  
38 Irritating to skin.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
65 Harmful: may cause lung damage if swallowed.
- Safety phrases:  
2 Keep out of the reach of children.  
23 Do not breathe fumes/aerosol.  
24/25 Avoid contact with skin and eyes.  
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 %
NK	25-50

- 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.  
21/22 Harmful in contact with skin and if swallowed.

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Trade name: Epifanes PP Varnish extra Component A (base)

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36/37 Irritating to eyes and respiratory system.

36/38 Irritating to eyes and skin.

37 Irritating to respiratory system.

38 Irritating to skin.

48 Danger of serious damage to health by prolonged exposure.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

65 Harmful: may cause lung damage if swallowed.

66 Repeated exposure may cause skin dryness or cracking.

- Department issuing MSDS: Environment protection department.
- Contact: J.J. van Dijk
- \* Data compared to the previous version altered.

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

- Product details
- Trade name: Epifanes PP Varnish Extra Component B (Cure)
- Application of the substance / the preparation  
Curing component of a high build two-component varnish
- Manufacturer/Supplier:  
W.Heeren & Zoon BV  
P.O. Box 166  
Netherlands  
Phone:(++31)297 360366  
Fax :(++31)297 342078
- Further information obtainable from: Environment protection department.

### 2 Composition/information on ingredients

- Chemical characterization
- Description: Mixture of substances listed below with nonhazardous additions.

• Dangerous components:

CAS: 1330-20-7 EINECS: 215-535-7	xylene Xn, Xi; R 10-20/21-38	25-50%
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. Xn, Xi, N; R 10-37-51/53-65-66	10-25%
CAS: 108-65-6 EINECS: 203-603-9	2-methoxy-1-methylethyl acetate Xi; R 10-36	2.5-10%
CAS: 100-41-4 EINECS: 202-849-4	ethylbenzene Xn, F; R 11-20	≤ 2.5%
CAS: 26471-62-5 EINECS: 247-722-4	m-tolyldiene diisocyanate T+, Xi; R 26-36/37/38-40-42/43-52/53	≤ 2.5%

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

### 3 Hazards identification

- Hazard description:  
Xn Harmful
- 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 20/21 Harmful by inhalation and in contact with skin.  
R 37/38 Irritating to respiratory system and skin.  
R 42 May cause sensitisation by inhalation.  
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R 65 Harmful: may cause lung damage if swallowed.  
Contains isocyanates. See information supplied by the manufacturer
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.



Trade name: Epifanes PP Varnish Extra Component B (Cure)

(Contd. of page 1)

**4 First-aid measures**

- **General information:**  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
In case of unconsciousness place patient stably in side position for transportation.
- **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.

**5 Fire-fighting measures**

- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Protective equipment:** Mouth respiratory protective device.

**6 Accidental release measures**

- **Person-related safety precautions:**  
Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**  
Inform respective authorities in case of seepage into water course or sewage system.  
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).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.

**7 Handling and storage**

- **Handling:**
- **Information for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **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:** Keep container tightly sealed.

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(Contd. on page 3)

Trade name: Epifanes PP Varnish Extra Component B (Cure)

(Contd. of page 2)

**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:

1330-20-7 xylene

WEL	Short-term value: 441 mg/m <sup>3</sup> , 100 ppm Long-term value: 220 mg/m <sup>3</sup> , 50 ppm Sk; BMGV
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108-65-6 2-methoxy-1-methylethyl acetate

WEL	Short-term value: 548 mg/m <sup>3</sup> , 100 ppm Long-term value: 274 mg/m <sup>3</sup> , 50 ppm Sk
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100-41-4 ethylbenzene

WEL	Short-term value: 552 mg/m <sup>3</sup> , 125 ppm Long-term value: 441 mg/m <sup>3</sup> , 100 ppm
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26471-62-5 m-tolyldiene diisocyanate

WEL	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO
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- 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.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- Respiratory protection:  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- 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  
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: Tightly sealed goggles

Trade name: Epifanes PP Varnish Extra Component B (Cure)

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## 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:	137°C

### • Flash point:

25°C

### • Ignition temperature:

315°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:	0.7 Vol %
Upper:	7.5 Vol %

### • Vapour pressure at 20°C:

6.7 hPa

### • Density at 20°C:

1.03698 g/cm<sup>3</sup>

### • Solubility in / Miscibility with water:

Not miscible or difficult to mix.

### • Solvent content:

Organic solvents:	60.2 %
VOC content:	60.2 %
	624.4 g/l / 5.21 lb/gl

### • Solids content:

39.5 %

## 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:

#### • LD/LC50 values relevant for classification:

1330-20-7 xylene

Oral	LD50	4300 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h	>10.2 mg/l (rat)

- Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.

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Reviewed on 14.03.2007

Trade name: Epifanes PP Varnish Extra Component B (Cure)

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- on the eye: No irritating effect.
- Sensitization: Sensitization possible through inhalation.
- 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:  
Harmful  
Irritant

**12 Ecological information**

- Ecotoxicological effects:
- Remark: Harmful to fish
- 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.  
Harmful to aquatic organisms

**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 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

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Reviewed on 14.03.2007

Trade name: Epifanes PP Varnish Extra Component B (Cure)

(Contd. of page 5)

- 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:



Xn Harmful

- Hazard-determining components of labelling:  
Solvent naphtha (petroleum), light arom.  
m-tolylidene diisocyanate  
xylene
- Risk phrases:  
10 Flammable.  
20/21 Harmful by inhalation and in contact with skin.  
37/38 Irritating to respiratory system and skin.  
42 May cause sensitisation by inhalation.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
65 Harmful: may cause lung damage if swallowed.
- Safety phrases:  
2 Keep out of the reach of children.  
23 Do not breathe fumes/aerosol.  
24/25 Avoid contact with skin and eyes.  
36 Wear suitable protective clothing.  
51 Use only in well-ventilated areas.  
56 Dispose of this material and its container to hazardous or special waste collection point.
- Special labelling of certain preparations:  
Contains isocyanates. See information supplied by the manufacturer
- National regulations:
- Technical instructions (air):

Class	Share in %
I	≤ 2,5
NK	50-100

- 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.

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Trade name: Epifanes PP Varnish Extra Component B (Cure)

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- 20 Harmful by inhalation.
- 20/21 Harmful by inhalation and in contact with skin.
- 26 Very toxic by inhalation.
- 36 Irritating to eyes.
- 36/37/38 Irritating to eyes, respiratory system and skin.
- 37 Irritating to respiratory system.
- 38 Irritating to skin.
- 40 Limited evidence of a carcinogenic effect.
- 42/43 May cause sensitisation by inhalation and skin contact.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 65 Harmful: may cause lung damage if swallowed.
- 66 Repeated exposure may cause skin dryness or cracking.

- Department issuing MSDS: Environment protection department.
- Contact: J.J. van Dijk
- \* Data compared to the previous version altered.

GB