

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

- Product details
- Trade name: Epifanes Epoxy Primer Component A (base)
- Application of the substance / the preparation  
base component of a two-component primer
- 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.
- Information in case of emergency: Zie onder fabrikant/leverancier

**2 Composition/information on ingredients**

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

• Dangerous components:

CAS: 107-98-2 EINECS: 203-539-1	1-methoxy-2-propanol	R 10	10-25%
CAS: 1330-20-7 EINECS: 215-535-7	xylene	Xn, Xi; R 10-20/21-38	2.5-10%
CAS: 546-93-0	Magnesite		≤ 2.5%
CAS: 1314-13-2 EINECS: 215-222-5	zinc oxide	N; R 50/53	≤ 2.5%

- 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 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 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: 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.

Trade name: Epifanes Epoxy Primer Component A (base)

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**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: Wear fully protective suit.

**6 Accidental release measures**

- Person-related safety precautions:  
Wear protective clothing.  
Ensure adequate ventilation  
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).  
Ensure adequate ventilation.

**7 Handling and storage**

- Handling:
- Information for safe handling:  
Keep away from heat and direct sunlight.  
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:  
Store only in the original receptacle.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.

**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:

107-98-2 1-methoxy-2-propanol

OES	Short-term value: 560 mg/m <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm New, IOELV, Sk
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1330-20-7 xylene

OES	Short-term value: 662 mg/m <sup>3</sup> , 150 ppm Long-term value: 441 mg/m <sup>3</sup> , 100 ppm Sk
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546-93-0 Magnesite

OES	Long-term value: 10* 4** mg/m <sup>3</sup> *total inhalable dust **respirable dust
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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.  
Do not inhale gases / fumes / aerosols.
- Respiratory protection:  
Suitable respiratory protective device recommended.  
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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Tightly sealed goggles

## 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:	> 31°C
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• Ignition temperature:	270°C
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• Self-igniting:	Product is not selfigniting.
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• Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
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• Explosion limits:	
Lower:	2.3 Vol %

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Trade name: Epifanes Epoxy Primer Component A (base)

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|---|--|
| • Vapour pressure at 20°C:                              | 12 hPa                                     |
| • Density at 20°C:                                      | 1.73 g/cm <sup>3</sup>                     |
| • Solubility in / Miscibility with water:               | Not miscible or difficult to mix.          |
| • Viscosity:<br>Kinematic at 20°C:                      | 100 s (DIN 53211/4)                        |
| • Solvent content:<br>Organic solvents:<br>VOC content: | 24.4 %<br>24.3 %<br>421.5 g/l / 3.52 lb/gl |
| • Solids content:                                       | 75.2 % (VB% 1h150 C)                       |

#### 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)

1314-13-2 zinc oxide

Oral	LD50	7950 mg/kg (mouse)
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- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.

#### 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

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Trade name: Epifanes Epoxy Primer Component A (base)

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**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.
- UN-Number: 1263
- Packaging group: III
- Description of goods: 1263 PAINT
- Maritime transport IMDG:
- IMDG Class: -
- Marine pollutant: No
- 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.
- Risk phrases:  
10 Flammable.  
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Safety phrases:  
2 Keep out of the reach of children.  
23 Do not breathe fumes/aerosol.  
24/25 Avoid contact with skin and eyes.  
46 If swallowed, seek medical advice immediately and show this container or label.  
51 Use only in well-ventilated areas.
- National regulations:
- Technical instructions (air):

Class	Share in %
Water	≤ 2,5
NK	10-25

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

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Trade name: Epifanes Epoxy Primer Component A (base)

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\* **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.

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

• Department issuing MSDS: Environment protection department.

• Contact: J.J. van Dijk

• \* Data compared to the previous version altered.

None

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

- Product details
- Trade name: Epifanes Epoxy Primer Component B
- Application of the substance / the preparation  
curing component of a two-component primer
- 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.
- Information in case of emergency: Zie rubriek Fabrikant/leverancier

### 2 Composition/information on ingredients

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

• Dangerous components:

	Polyaminoamide	Xi; R 41	50-100%
CAS: 1330-20-7 EINECS: 215-535-7	xylene	Xn, Xi; R 10-20/21-38	25-50%
CAS: 71-36-3 EINECS: 200-751-6	butan-1-ol	Xn, Xi; R 10-22-37/38-41-67	2.5-10%

- 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 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
R 36/38 Irritating to eyes and skin.
- 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:  
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.

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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. If symptoms persist, consult a doctor.
- After swallowing: Call for a doctor immediately.

**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 clothing.  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.
- 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).  
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:  
Store only in the original receptacle.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep container tightly sealed.

**\* 8 Exposure controls/personal protection**

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

(Contd. on page 3)



Trade name: Epifanes Epoxy Primer Component B

(Contd. of page 2)

• Ingredients with limit values that require monitoring at the workplace:

1330-20-7 xylene

OES	Short-term value: 662 mg/m <sup>3</sup> , 150 ppm Long-term value: 441 mg/m <sup>3</sup> , 100 ppm Sk
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71-36-3 butan-1-ol

OES	Short-term value: 154 mg/m <sup>3</sup> , 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:  
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 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Tightly sealed goggles

**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:	120°C

• Flash point: 27°C

• Ignition temperature: 340.0°C

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Trade name: Epifanes Epoxy Primer Component B

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• 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:	1.1 Vol %
Upper:	7.0 Vol %
• Vapour pressure at 20°C:	6.7 hPa
• Density at 20°C:	0.940 g/cm <sup>3</sup>
• Solubility in / Miscibility with water:	Not miscible or difficult to mix.
• pH-value at 20°C:	10
• Viscosity:	
Dynamic at 20°C:	1400 mPas
• Solvent content:	
Organic solvents:	42.0 %
VOC content:	42.0 %
	394.8 g/l / 3.29 lb/gl
• Solids content:	56.0 % (VB% 1h150 C)

**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)

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

GB

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Printing date 14.03.2007

Reviewed on 14.03.2007

Trade name: Epifanes Epoxy Primer Component B

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**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.  
Danger to drinking water if even small quantities leak into the ground.

**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): 38
- UN-Number: 2924
- Packaging group: III
- Hazard label 3+8
- Description of goods: 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (XYLENES, Polyaminoamide)
- Maritime transport IMDG:
- IMDG Class: 3
- UN Number: 2924
- Label 3+8
- Packaging group: III
- EMS Number: F-E,S-C
- Marine pollutant: No
- Proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (XYLENES, Polyaminoamide)
- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: 3
- UN/ID Number: 2924
- Label 3+8
- Packaging group: III
- Proper shipping name: FLAMMABLE LIQUID, CORROSIVE, N.O.S. (XYLENES, Polyaminoamide)

**15 Regulatory information**

- Labelling according to EU guidelines:  
The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

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Trade name: Epifanes Epoxy Primer Component B

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- Code letter and hazard designation of product:



Xn Harmful

- Hazard-determining components of labelling:  
xylene

- Risk phrases:

10 Flammable.  
20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
36/38 Irritating to eyes and skin.

- Safety phrases:

2 Keep out of the reach of children.  
23 Do not breathe aerosol.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
46 If swallowed, seek medical advice immediately and show this container or label.  
51 Use only in well-ventilated areas.

- 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.  
20/21 Harmful by inhalation and in contact with skin.  
22 Harmful if swallowed.  
37/38 Irritating to respiratory system and skin.  
38 Irritating to skin.  
41 Risk of serious damage to eyes.  
67 Vapours may cause drowsiness and dizziness.

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