

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

- 1.1 Product identifier
- Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- Product category
 - PC9a Coatings and paints, thinners, paint removers
 - PC9b Fillers, putties, plasters, modelling clay
- Process category
 - PROC10 Roller application or brushing
 - PROC5 Mixing or blending in batch processes
- Environmental release category ERC2 Formulation into mixture
- Application of the substance / the mixture
See our technical datasheet for application of this product.
harderner
- 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 instructions label/msds

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Sens. 1 H317 May cause an allergic skin reaction.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)

(Contd. of page 1)

· Hazard pictograms



GHS05 GHS07 GHS09

· Signal word Danger

· Hazard-determining components of labelling:

Benzyl alcohol
3-aminomethyl-3,5,5-trimethylcyclohexylamine
m-phenylenebis(methylamine)
3-aminopropyldiethylamine

· Hazard statements

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· 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: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 7727-43-7 EINECS: 231-784-4 Reg.nr.: 01-2119491274-35	barium sulphate, natural substance with a Community workplace exposure limit	25-50%
CAS: 100-51-6 EINECS: 202-859-9 Index number: 603-057-00-5 Reg.nr.: 01-2119492630-38	Benzyl alcohol ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332	10-25%

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.02.2017

Version number 6

Revision: 24.02.2017

Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)

(Contd. of page 2)

CAS: 1477-55-0 EINECS: 216-032-5 Reg.nr.: 01-2119480150-50	m-phenylenebis(methylamine) ⚠ Skin Corr. 1B, H314 ⚠ Acute Tox. 4, H302	2.5-10%
CAS: 2855-13-2 EINECS: 220-666-8 Index number: 612-067-00-9 Reg.nr.: 01-2119514687-32	3-aminomethyl-3,5,5-trimethylcyclohexylamine ⚠ Skin Corr. 1B, H314 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; ⚠ Skin Sens. 1, H317 ⚠ Aquatic Chronic 3, H412	2.5-10%
CAS: 98-54-4 EINECS: 202-679-0 Index number: 604-090-00-8 Reg.nr.: 01-2119489419-21	4-tert-butylphenol ⚠ Repr. 2, H361f ⚠ Eye Dam. 1, H318 ⚠ Skin Irrit. 2, H315	2.5-10%
CAS: 90-72-2 EINECS: 202-013-9 Index number: 603-069-00-0 Reg.nr.: 01-2119560597-27	2,4,6-tris(dimethylaminomethyl)phenol ⚠ Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	≤ 2.5%
CAS: 104-78-9 EINECS: 203-236-4 Index number: 612-062-00-1 Reg.nr.: 01-2119965402-39	3-aminopropyldiethylamine ⚠ Flam. Liq. 3, H226 ⚠ Skin Corr. 1B, H314 ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; ⚠ Skin Sens. 1, H317	≤ 2.5%
CAS: 121158-58-5 EC number: 310-154-3 Index number: 604-092-00-9 Reg.nr.: 01-2119513207-49	phenol, dodecyl-, branched ⚠ Skin Corr. 1C, H314 ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410	≤ 2.5%

• Additional information:

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

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information:
Immediately remove any clothing soiled by the product.
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 and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
- After eye contact:
Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
Call for a doctor immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- 4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.

(Contd. on page 4)

Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)

(Contd. of page 3)

- 4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
Suitable extinguishing agents:
Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture
During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions:
Inform respective authorities in case of seepage into water course or sewage system.
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).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
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
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- Information about fire - and explosion protection:
Keep respiratory protective device available.
- 7.2 Conditions for safe storage, including any incompatibilities
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.
- 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

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

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 24.02.2017

Version number 6

Revision: 24.02.2017

Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)

(Contd. of page 4)

- 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.

7727-43-7 barium sulphate, natural

WEL	Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable dust
-----	---

- DNELs

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Inhalative	Acute-local effects, worker	20.1 mg/m ³ (Werker/Worker)
	Acute - systemic effects, worker	20.1 mg/m ³ (Werker/Worker)

- PNECs

1477-55-0 m-phenylenebis(methylamine)

Aquatic compartment - freshwater	0.094 mg/L (Consument)
Aquatic compartment - marine water	0.0094 mg/L (4)
Aquatic compartment - water, intermittent releases	0.152 mg/L (intermittent release water)
Aquatic compartment - sediment in freshwater	0.43 mg/kg sed dw (3)
Aquatic compartment - sediment in marine water	0.043 mg/kg sed dw (5)
Terrestrial compartment - soil	0.045 mg/kg dw (8)
Sewage treatment plant	10 mg/L (7)

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Aquatic compartment - freshwater	0.06 mg/L (Consument)
Aquatic compartment - marine water	0.006 mg/L (4)
Aquatic compartment - water, intermittent releases	0.23 mg/L (intermittent release water)
Aquatic compartment - sediment in freshwater	5.784 mg/kg sed dw (3)
Aquatic compartment - sediment in marine water	0.578 mg/kg sed dw (5)
Terrestrial compartment - soil	1.121 mg/kg dw (8)
Sewage treatment plant	3.18 mg/L (7)

- Additional information: The lists valid during the making were used as basis.

- 8.2 Exposure controls

- 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.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- Respiratory protection:

Not necessarily with good ventilation, however, use a filter AX when ventilation is inadequate!

(Contd. on page 6)

Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)

(Contd. of page 5)

- 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.

- For the permanent contact gloves made of the following materials are suitable:

PVA, fluorinated rubber

Glove thickness > 0.7mm, breakthrough time > 480 min. To EN374

- As protection from splashes gloves made of the following materials are suitable:

Nitrile

Glove thickness > 0.45 mm, breakthrough time > 30 min. to EN374

- Eye protection:



Tightly sealed goggles

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 at 20 °C: 7

- Change in condition

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: >100 °C

- Flash point: 101 °C

- Flammability (solid, gas): Not applicable.

- Ignition temperature: 435 °C

- Decomposition temperature: Not determined.

(Contd. on page 7)

Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)

(Contd. of page 6)

· Auto-ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits: Lower:	1.3 Vol %
Upper:	13.0 Vol %
· Vapour pressure at 20 °C:	0.1 hPa
· Density at 20 °C:	1.413 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Partition coefficient: n-octanol/ water:	Not determined.
· Viscosity: Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content: Organic solvents:	17.5 %
VOC content:	17.5 %
	VOC content: 164.4 g/l / 1.37 lb/gl
Solids content:	97.7 %
· 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
Harmful if swallowed.

· LD/LC50 values relevant for classification:

100-51-6 Benzyl alcohol

Oral	LD50	1230 mg/kg bw (rat)
Dermal	LD50	2000 mg/kg bw (rabbit)

(Contd. on page 8)

Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)

(Contd. of page 7)

1477-55-0 m-phenylenebis(methylamine)		
Oral	LD50	1040 mg/kg bw (rat)
98-54-4 4-tert-butylphenol		
Oral	LD50	2951 mg/kg bw (rat)
Dermal	LD50	2288 mg/kg bw (rabbit)
104-78-9 3-aminopropyldiethylamine		
Oral	LD50	1410 mg/kg bw (rat)
Dermal	LD50	750 mg/kg bw (rabbit)

- Primary irritant effect:
- Skin corrosion/irritation
Causes severe skin burns and eye damage.
- Serious eye damage/irritation
Causes serious eye damage.
- Respiratory or skin sensitisation
May cause an allergic skin reaction.
- 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:

1477-55-0 m-phenylenebis(methylamine)

Inhalative	LC50/4 h	2.4 mg/l (rat)
------------	----------	----------------

- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Ecotoxicological effects:
- Remark: Toxic for fish
- Additional 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.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- 12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

(Contd. on page 9)

Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)

(Contd. of page 8)

- 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.

- European waste catalogue

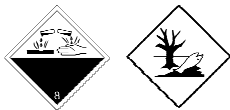
08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number
ADR, IMDG, IATA UN2735
- 14.2 UN proper shipping name
ADR 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (phenol, dodecyl-, branched, m-phenylenebis(methylamine)), ENVIRONMENTALLY HAZARDOUS
IMDG, IATA POLYAMINES, LIQUID, CORROSIVE, N.O.S. (phenol, dodecyl-, branched, m-phenylenebis(methylamine))

- 14.3 Transport hazard class(es)
ADR



- Class 8 (C9) Corrosive substances.
- Label 8

- IMDG, IATA



- Class 8 Corrosive substances.
- Label 8

- 14.4 Packing group
ADR, IMDG, IATA III

- 14.5 Environmental hazards:
Marine pollutant: No

(Contd. on page 10)

Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)

(Contd. of page 9)

· Special marking (ADR):	Symbol (fish and tree)
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Danger code (Kemler):	80
· EMS Number:	F-A, S-B
· Segregation groups	Alkalis
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" acids.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. (PHENOL, DODECYL-, BRANCHED, M-PHENYLENEBIS (METHYLAMINE)), 8, III, ENVIRONMENTALLY HAZARDOUS

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 E2 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- National regulations:
- Technical instructions (air):

Class	Share in %
NK	10-25

- Waterhazard class:
Water hazard class 1 (Self-assessment): slightly hazardous for water.

(Contd. on page 11)

Trade name: Epifanes Epoxy Filler 1500 Comp. B (cure)

(Contd. of page 10)

- 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.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H361f Suspected of damaging fertility.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful 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)
- ICAO: International Civil Aviation Organisation
- 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)
- PNEC: Predicted No-Effect Concentration (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
- Skin Corr. 1B: Skin corrosion/irritation - Category 1B
- Skin Corr. 1C: Skin corrosion/irritation - Category 1C
- Skin Irrit. 2: Skin corrosion/irritation - Category 2
- Eye Dam. 1: Serious eye damage/eye irritation - Category 1
- Eye Irrit. 2: Serious eye damage/eye irritation - Category 2
- Skin Sens. 1: Skin sensitisation - Category 1
- Repr. 2: Reproductive toxicity - Category 2
- 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
- Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

- * Data compared to the previous version altered.