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1 Identification

- · Product identifier
- · Trade name: Epifanes Epoxy Filler 1500 (comp.A)
- · Relevant identified uses of the substance or mixture and uses advised against
- Product category PC9b Fillers, putties, plasters, modelling clay
- · Process category

Mixing or blending in batch processes for formulation of preparations PROC5 and articles (multistage and/or significant contact)

- Environmental release category ERC2 Formulation of preparations
- · Application of the substance / the mixture

See our technical datasheet for application of this product.

- · 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:

Emergency Phone Number (24 hours) CHEMTREC (800-424-9300)

Outside US: 703-527-3887

2 Hazard(s) identification

Classification of the substance or mixture



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

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



Xi; Irritant

R36/38-43: Irritating to eyes and skin. May cause sensitisation by skin contact.



N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- · 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.
- · 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
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

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· Hazard pictograms



- · Signal word Warning
- · Hazard-determining components of labeling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average

molecular weight = 700)

reactie produkt: bisfenol-A-epichloorhydrine epoxyhars (gemiddeld

molecuulgewicht <700)

1,6-hexanediol diglycidyl ehter

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No

smoking.

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face

 $\verb"protection".$

P301+P310 If swallowed: Immediately call a poison center/doctor.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Dispose of contents/container in accordance with local/regional/

national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



P501

Health = 1
Fire = 1
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 1
Fire = 1
Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Mixture of the substances listed below with nonhazardous additions.

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Dangerous components:		
CAS: 7727-43-7 EINECS: 231-784-4 Reg.nr.: 01-2119491274-35	barium sulphate, natural	25-50
CAS: 25068-38-6 NLP: 500-033-5 Index number: 603-074-00-8 Reg.nr.: 01-2119456619-26	reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight = 700) Xi R36/38-43 N R51/53 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-50
CAS: 9003-36-5 NLP: 500-033-5 Reg.nr.: 01-2119454392-40	reactie produkt: bisfenol-A- epichloorhydrine epoxyhars (gemiddeld molecuulgewicht <700) Xi R36/38-43 N R51/53 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	10-2
CAS: 16096-31-4 EINECS: 240-260-4 Reg.nr.: 01-2119463471-41	1,6-hexanediol diglycidyl ehter Xi R36/38-43 R52/53 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	2.5-1

Additional information:

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

4 First-aid measures

- · Description of first aid measures
- · 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.
- · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- Most important symptoms and effects, both acute and delayed
 No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

Use fire fighting measures that suit the environment.

· Special hazards arising from the substance or mixture No further relevant information available.

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(Contd. of page 3)

- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
 Not required.
- · Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Ensure good ventilation/exhaustion at workplace

· Information about protection against explosions and fires:

No special measures required.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- \cdot 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 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.
- · Control parameters
- · Components 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	bariu	ım su.	lphat	e, na	tural
PET.	Long-	-term	value	15 د	* 5**	mcr/m

*total dust **respirable fraction

REL Long-term value: 10* 5** mg/m³

*total dust **respirable fraction

TLV Long-term value: 5* mg/m³ *inhalable fraction; E

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· Additional information:

The lists that were valid during the creation were used as basis.

- · 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 and skin.

· Breathing equipment:

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

· 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

9 Physical and chemical properties

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

Form: Fluid

Color: According to product specification

· Odor: Characteristic

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	(Contd. of page
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. > 200 °C (> 392 °F)
Flash point:	151 °C (304 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits: Lower: Upper:	Not determined. Not determined.
Vapor pressure:	Not determined.
Density at 20 °C (68 °F): Relative density Vapour density Evaporation rate	1.508 g/cm ³ (12.584 lbs/gal) Not determined. Not determined. Not determined.
Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity: Dynamic: Kinematic:	Not determined. Not determined.
Solvent content: Organic solvents: VOC content:	0.0 % VOC content:
Solids content:	100.0 %

10 Stability and reactivity

- · Reactivity
- \cdot Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- \cdot Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50	value	s that are relevant for classification:	
25068-3		action product: bisphenol-A-(epichlorhydrin) epoxy resin (number erage molecular weight = 700)	
Oral	LD50	11400 mg/kg bw (rat)	
Dermal	LD50	>2000 mg/kg bw (rabbit)	
9003-36		ctie produkt: bisfenol-A-epichloorhydrine epoxyhars (gemiddeld ecuulgewicht <700)	
Oral	LD50	11400 mg/kg bw (rat)	
Dermal	LD50	> 2000 mg/kg bw (rabbit)	
16096-3	1-4 1,	6-hexanediol diglycidyl ehter	
Oral	LD50	2900 mg/kg bw (rat)	
Dermal	LD50	> 4900 mg/kg bw (rat)	

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- \cdot Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:
 The product shows the following dangers according to internally approved calculation methods for preparations:
 Irritant
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

 None of the ingredients is listed.
- NTP (National Toxicology Program)
 None of the ingredients is listed.
- · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- Aquatic toxicity:

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

Oral	EC50	1.1 - 3.6 mg/l	((Daphnia magna))
Inhalative	LC50/96 h	1.5 - 7.7 mg/l	((Regenboogforel))

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (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. Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

- \cdot Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- \cdot Other adverse effects No further relevant information available.

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.

14 Transport information	
· UN-Number	
· DOT, ADR, IMDG, IATA	UN3082
· UN proper shipping name	
· DOT	CONSUMER COMMODITY, ORM-D
	Environmentally hazardous substances,
	liquid, n.o.s. (reaction product:
	bisphenol-A-(epichlorhydrin) epoxy resin
	(number average molecular weight = 700))
· ADR	3082 Environmentally hazardous
	substances, liquid, n.o.s. (reaction
	<pre>product: bisphenol-A-(epichlorhydrin)</pre>
	epoxy resin (number average molecular
	weight = 700))
· IMDG	CONSUMER COMMODITY, ORM-D
	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	LIQUID, N.O.S.
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
	LIQUID, N.O.S. (reaction product:
	bisphenol-A-(epichlorhydrin) epoxy resin
	(number average molecular weight = 700))
· Transport hazard class(es)	
· DOT, IMDG	
· Class	9 Miscellaneous dangerous substances and articles

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	(Conta. or page
· ADR	
¥2>	
· Class	9 (M6) Miscellaneous dangerous substances and articles
· IATA	
· Class	9 Miscellaneous dangerous substances and articles
· Label	9
Packing groupDOT, ADR, IMDG, IATA	III
· Environmental hazards:	
· Marine pollutant:	nein No
· Special marking (ADR):	Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles
· Danger code (Kemler):	90
· EMS Number:	F-A, S-F
 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	K Not applicable.
 Transport/Additional information: DOT 	
· Quantity limitations	On passenger aircraft/rail: No limit
· Remarks:	On cargo aircraft only: No limit CERCLA/DOT RQ: 617gal./4786 lbs.
· ADR	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging 30 ml Maximum net quantity per outer packaging 1000 ml
· 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



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UN "Model Regulation":

UN3082, Environmentally hazardous
substances, liquid, n.o.s. (reaction
product: bisphenol-A-(epichlorhydrin)
epoxy resin (number average molecular
weight = 700)), 9, III

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
 · Section 355 (extremely hazardous substances):
- · Section 313 (Specific toxic chemical listings):

7727-43-7 barium sulphate, natural

None of the ingredient is listed.

• TSCA (Toxic Substances Control Act):

7727-43-7 barium sulphate, natural

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin
(number average molecular weight = 700)

9003-36-5 reactie produkt: bisfenol-A-epichloorhydrine epoxyhars (gemiddeld moleculgewicht <700)

molecuulgewicht <700)
16096-31-4 1,6-hexanediol diglycidyl ehter

Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· 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)

7727-43-7 barium sulphate, natural

D, CBD(inh), NL(oral)

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

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

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

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· Hazard pictograms



- · Signal word Warning
- · Hazard-determining components of labeling:

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average

molecular weight = 700)

reactie produkt: bisfenol-A-epichloorhydrine epoxyhars (gemiddeld

molecuulgewicht <700)

1,6-hexanediol diglycidyl ehter

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No

smoking

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face

 $\verb"protection".$

P301+P310 If swallowed: Immediately call a poison center/doctor. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all

contaminated clothing. Rinse skin with water/shower.

P501 Dispose of contents/container in accordance with local/regional/

national/international regulations.

- · National regulations:
- · Water hazard class:

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

· Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

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.

- · Date of preparation / last revision 03/31/2015 / 2
- · 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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists 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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

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LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

 \cdot * Data compared to the previous version altered.

US