

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Version number 3

Revision: 13.05.2015

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

1.1 Product identifier

Trade name **Epoxy PH Color, comp. A**

Article number: 6960-66

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the mixture Coating

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Remmers Baustofftechnik GmbH
Postfach 1255
D-49624 Lönigen / Germany
Tel.: +49(0)5432/83-0
Fax: +49(0)5432/3985

Remmers (UK) Limited
Unit B1 The Fleming Centre
West Sussex RH10 9NN
fon +44 (0) 845 373 0103
fax +44 (0) 845 373 0104

Informing department:

Product Safety department: Tel.: Steve Dunn Tel.: +44 (0) 845 373 0103
E-Mail: sales@remmers.co.uk

1.4 Emergency telephone number:

during working hours:
U.K.: Tel.: +44 (0) 845 373 0103
sales@remmers.co.uk
Far East: Tel.: +65 (0) 67410277
Head Office Germany: Tel.: +49 (0)5432 83 187
info@remmers.de
after working hours: Tel.: +49 (0)171 21 34 091

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

| | | |
|-------------------|------|--|
| Muta. 2 | H341 | Suspected of causing genetic defects. |
| Aquatic Chronic 2 | H411 | Toxic to aquatic life with long lasting effects. |
| Skin Irrit. 2 | H315 | Causes skin irritation. |
| Eye Irrit. 2 | H319 | Causes serious eye irritation. |
| Skin Sens. 1 | H317 | May cause an allergic skin reaction. |

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

Xn; Harmful

R68: Possible risk of irreversible effects.

Xi; Irritant

R36/38: Irritating to eyes and skin.

Xi; Sensitising

R43: 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.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Version number 3

Revision: 13.05.2015

Trade name Epoxy PH Color, comp. A

(Contd. of page 1)

Classification system:

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

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

GHS07 GHS08 GHS09

Signal word Warning**Hazard-determining components of labelling:**

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

Glycidylester of neodecan acid

bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700)

hexandiol diglycidylether

oxirane, mono[(C12-14-alkyloxy)methyl] derivs

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

P273 Avoid release to the environment.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH205 Contains epoxy constituents. May produce an allergic reaction.

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 the substances listed below with harmless additions.

Dangerous components:

| | | |
|--------------------------------|---|--------|
| CAS: 25068-38-6 | reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) | 20-40% |
| NLP: 500-033-5 | Xi R36/38; Xi R43; N R51/53 | |
| Index number: 603-074-00-8 | | |
| Reg.nr.: 01-2119456619-26-XXXX | Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 | |

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Version number 3

Revision: 13.05.2015

Trade name Epoxy PH Color, comp. A

(Contd. of page 2)

| | | |
|--|--|--------|
| CAS: 26761-45-5 EINECS: 247-979-2 Reg.nr.: 01-2119431597-33-XXXX | Glycidylester of neodecan acid Xn R68; Xi R43; N R51/53 ----- Muta. 2, H341; Aquatic Chronic 2, H411; Skin Sens. 1, H317 | 5-10% |
| CAS: 28064-14-4 NLP: 500-006-8 Reg.nr.: 01-2119454392-40-XXXX | bisphenol A-(epichlorhydrin); epoxy resin(number average molecular weight<700) Xi R38; Xi R43; N R51/53 ----- Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317 | 2.5-5% |
| CAS: 16096-31-4 EINECS: 240-260-4 Reg.nr.: 01-2119463471-41-XXXX | hexandiol diglycidylether Xi R36/38; Xi R43 R52/53 ----- Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412 | ≤1.0% |
| CAS: 68609-97-2 EINECS: 271-846-8 Index number: 603-103-00-4 Reg.nr.: 01-2119485289-22-XXXX | oxirane, mono[(C12-14-alkyloxy)methyl] derivs Xi R38; Xi R43 ----- Skin Irrit. 2, H315; Skin Sens. 1, H317 | ≤0.5% |
| CAS: 64742-95-6 EINECS: 265-199-0 Index number: 649-356-00-4 Reg.nr.: 01-2119455851-35-XXXX | Solvent naphtha (mineral oil), slight aromatic Xn R65; Xi R37; N R51/53 R10-66-67 ----- Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336 | ≤0.5% |

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

If symptoms occur or in case of doubt, seek medical attention. In case of unconsciousness, do not administer anything orally.

After inhalation Seek medical treatment in case of complaints.

After skin contact

If skin irritation continues, consult a doctor.

Wash immediately with water and soap and rinse thoroughly.

After eye contact

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

After swallowing

Rinse out mouth immediately with plenty of water and administer plenty of water in small swallows (diluting effect).

A person vomiting while lying on their back should be turned onto their side.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

Water spray jet

Carbon dioxide

Foam

Fire-extinguishing powder

5.2 Special hazards arising from the substance or mixture

May be released in case of fire

Carbon monoxide (CO)

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Version number 3

Revision: 13.05.2015

Trade name **Epoxy PH Color, comp. A**

(Contd. of page 3)

Carbon dioxide

further harmful conflagration gases and fumes

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Hydrogen chloride (HCl)

Not rated as flammable, however, it is combustible.

5.3 Advice for firefighters**Protective equipment:**

Wear full protective suit.

Wear self-contained breathing apparatus.

Additional information

Cool endangered containers with water spray jet.

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Ensure adequate means of retaining the water used for extinguishing

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

6.2 Environmental precautions:

Do not allow to enter the ground/soil.

Inform responsible authorities in case product reaches bodies of water or sewage system.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

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 information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Use only in well ventilated areas.**Information about protection against explosions and fires:** No special requirements.**7.2 Conditions for safe storage, including any incompatibilities****Storage****Requirements to be met by storerooms and containers:** Prevent any penetration into the ground.**Information on storage in a common storage facility:** none**Further information about storage conditions:**

Do not store under 5 °C.

Protect from frost.

Do not store above +30 °C.

Keep container tightly closed.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.**8.1 Control parameters****Components with limit values that require monitoring at the workplace:**

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

Additional information: The lists that were valid during compilation were used as a basis.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Version number 3

Revision: 13.05.2015

Trade name Epoxy PH Color, comp. A

(Contd. of page 4)

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

Do not eat, drink or smoke while working.
 Use skin protection cream for preventive skin protection.
 Keep away from food, beverages and animal feed.
 Immediately remove soiled, saturated clothing.
 Wash hands before pauses and after work.
 Avoid contact with eyes and skin.

Respiratory equipment:

In case vapours/aerosols develop:

Filter A (brown)

Only use ambient air independent respiratory equipment in pits, shafts and silos!

Protection of hands:

Impervious gloves

Long cuffed gloves

Material of gloves

Nitrile rubber, NBR

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

Break through time: max. 240 min (DIN EN 374).

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 safety glasses.

Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

| | |
|-------------------------|------------------------------------|
| Form: | Viscous |
| Colour: | According to product specification |
| Odour: | Weak, characteristic |
| Odour threshold: | Not determined. |

| | |
|------------------|-----------------|
| pH-value: | Not determined. |
|------------------|-----------------|

Change in condition

| | |
|-------------------------------------|----------------------------|
| Melting point/Melting range: | Not determined |
| Boiling point/Boiling range: | > 200 °C Not determined |

| | |
|---------------------|----------------|
| Flash point: | Not applicable |
|---------------------|----------------|

| | |
|--|-----------------|
| Inflammability (solid, gaseous) | Not applicable. |
|--|-----------------|

| | |
|------------------------------|----------------|
| Ignition temperature: | not applicable |
|------------------------------|----------------|

| | |
|-----------------------------------|-----------------|
| Decomposition temperature: | Not determined. |
|-----------------------------------|-----------------|

| | |
|-----------------------------|-------------------------------|
| Self-inflammability: | Product is not self-igniting. |
|-----------------------------|-------------------------------|

| | |
|-----------------------------|---------------------------|
| Danger of explosion: | Product is not explosive. |
|-----------------------------|---------------------------|

Explosive Limits:

| | |
|---------------|-----------------|
| Lower: | Not determined. |
|---------------|-----------------|

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Version number 3

Revision: 13.05.2015

Trade name Epoxy PH Color, comp. A

(Contd. of page 5)

| | |
|--|--|
| Upper: | Not determined. |
| Vapour pressure: | Not determined. |
| Density at 20 °C | 1.65 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 |
| Distribution coefficient (n-octanol/water): | Not determined. |
| Viscosity: | |
| dynamic at 20 °C: | 2800 mPas |
| kinematic: | Not determined. |
| 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if handled and stored 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:

None if used properly.

None if stored properly.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimates)

| | | |
|------------|----------|-------------------|
| Inhalative | LC50/4 h | 50.9 mg/l (Ratte) |
|------------|----------|-------------------|

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

| | | |
|------|------|-----------------------|
| Oral | LD50 | > 10000 mg/kg (Ratte) |
|------|------|-----------------------|

| | | |
|--------|------|----------------------|
| Dermal | LD50 | > 2000 mg/kg (Ratte) |
|--------|------|----------------------|

26761-45-5 Glycidylester of neodecan acid

| | | |
|------|------|----------------------|
| Oral | LD50 | > 2000 mg/kg (Ratte) |
|------|------|----------------------|

| | | |
|--------|------|--------------------------|
| Dermal | LD50 | > 2000 mg/kg (Kaninchen) |
|--------|------|--------------------------|

| | | |
|------------|----------|------------------|
| Inhalative | LC50/4 h | > 5 mg/l (Ratte) |
|------------|----------|------------------|

Primary irritant effect:

on the skin: Irritates skin and mucous membranes.

on the eye: Irritating effect.

Sensitisation: Sensitisation possible by skin contact.

Additional toxicological information:

The product shows the following dangers based on the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Irritant

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Version number 3

Revision: 13.05.2015

Trade name Epoxy PH Color, comp. A

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Muta. 2

(Contd. of page 6)

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

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: Do not allow product to reach ground water, bodies of water or sewage system.

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

Not hardened material must be disposed of as hazardous waste according to official regulations. Hardened product remains may be disposed of as building rubble or put into household garbage.

The given refuse codes are recommendations based upon the intended use of the product. Because of special use and disposal conditions at the user's, other codes may apply under other conditions.

Do not dispose of together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

| | |
|-----------|---|
| 08 01 11* | waste paint and varnish containing organic solvents or other dangerous substances |
|-----------|---|

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number

ADR, IMDG, IATA

UN3082

14.2 UN proper shipping name

ADR

3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)), MARINE POLLUTANT

IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Version number 3

Revision: 13.05.2015

Trade name Epoxy PH Color, comp. A

(Contd. of page 7)

14.3 Transport hazard class(es)**ADR**
Class
Label

 9 (M6) Miscellaneous hazardous substances and articles.
 9
IMDG, IATA
Class
Label

 9 Miscellaneous hazardous substances and articles.
 9

14.4 Packing group
ADR, IMDG, IATA

III

14.5 Environmental hazards:
Marine pollutant:

 Yes
 Symbol (fish and tree)

Special marking (ADR):
Special marking (IATA):

 Symbol (fish and tree)
 Symbol (fish and tree)
14.6 Special precautions for user

Warning: Miscellaneous hazardous substances and articles.

Kemler Number:
EMS Number:

 90
 F-A,S-F

14.7 Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code

Not applicable.

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
Tunnel restriction code

 3
 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":
 UN3082, ENVIRONMENTALLY HAZARDOUS
 SUBSTANCE, LIQUID, N.O.S. (reaction product:
 bisphenol-A-(epichlorhydrin) epoxy resin (number
 average molecular weight = 700)), 9, III

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No further relevant information available.

(Contd. on page 9)

EN

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 15.05.2015

Version number 3

Revision: 13.05.2015

Trade name Epoxy PH Color, comp. A

(Contd. of page 8)

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This data is based on our present state of knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship. Delivery specifications are found in the respective Technical Information Sheets.

Relevant phrases

H226 Flammable liquid and vapour.
 H304 May be fatal if swallowed and enters airways.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H341 Suspected of causing genetic defects.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

R10 Flammable.
 R36/38 Irritating to eyes and skin.
 R37 Irritating to respiratory system.
 R38 Irritating to skin.
 R43 May cause sensitisation by skin contact.
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R65 Harmful: may cause lung damage if swallowed.
 R66 Repeated exposure may cause skin dryness or cracking.
 R67 Vapours may cause drowsiness and dizziness.
 R68 Possible risk of irreversible effects.

Department issuing data specification sheet: Product Safety department / EHS

Abbreviations and acronyms:

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)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 Flam. Liq. 3: Flammable liquids, Hazard Category 3
 Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
 Muta. 2: Germ cell mutagenicity, Hazard Category 2
 STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
 Asp. Tox. 1: Aspiration hazard, Hazard Category 1
 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
 Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3