

Version number 6 Revision: 21.09.2011

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

- · Product identifier
- · Trade name: Ampreg 22 Fast Hardener
- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation Epoxy curing agent
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

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- · Informing department: Product safety department.
- · Emergency telephone number: Contact as above

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## 2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC

C; Corrosive

R34: Causes burns.

×

Xn; Harmful

R20/21/22-68: Harmful by inhalation, in contact with skin and if swallowed. Possible risk of irreversible

effects.

×

Xi; Sensitising

R43: May cause sensitisation by skin contact.

R52/53: Harmful 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 is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

- · Label elements
- · Labelling according to EU guidelines:

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

· Code letter and hazard designation of product:

C Corrosive

· Hazard-determining components of labelling:

2-piperazin-1-ylethylamine

phenol

Benzyl alcohol

- 3,6-diazaoctanethylenediamin
- 3,6-dioxaoctamethylenediamine
- 3-aminomethyl-3,5,5-trimethylcyclohexylamine

· Risk phrases:

20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

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- Causes burns.
- May cause sensitisation by skin contact. 43
- 68 Possible risk of irreversible effects.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Safety phrases:

- Keep container in a well-ventilated place.
- 20 When using do not eat or drink.
- 23 Do not breathe fumes.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- · 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 harmless additions.

| CAS: 32610-77-8                     | Formaldehyde Polymer with Phenol and TETA  | 25-50%   |
|-------------------------------------|--|----------|
| O/10. 02010 77 0                    | C R34; Xn R21/22; Xi R43<br>R52/53   | 20 0070  |
| CAS: 140-31-8<br>EINECS: 205-411-0  | 2-piperazin-1-ylethylamine<br>C R34;  Xn R21/22;  Xi R43<br>R52/53                 | 25-50%   |
| CAS: 100-51-6<br>EINECS: 202-859-9  | Benzyl alcohol<br>Xn R20/22;   Xi R43  | 10-25%   |
| CAS: 108-95-2<br>EINECS: 203-632-7  | phenol  ☐ T R23/24/25; ☐ C R34; ※ Xn R48/20/21/22-68  Muta. Cat. 3                 | 2.5-10%  |
| CAS: 112-24-3<br>EINECS: 203-950-6  | 3,6-diazaoctanethylenediamin<br>C R34;  Xn R21;  Xi R43<br>R52/53                  | 2.5-10%  |
| CAS: 929-59-9<br>EINECS: 213-203-6  | 3,6-dioxaoctamethylenediamine<br>☐ C R34; X Xn R22; X Xi R43                       | 2.5-10%  |
| CAS: 2855-13-2<br>EINECS: 220-666-8 | 3-aminomethyl-3,5,5-trimethylcyclohexylamine<br>C R34; Xn R21/22; Xi R43<br>R52/53 | 2.5-10%  |
| CAS: 9046-10-0                      | Polyoxyalkyleneamine C R34   | 2.5-10%  |
| CAS: 98-54-4<br>EINECS: 202-679-0   | 4-tert-butylphenol   | 0.5-2.5% |

## 4 First aid measures

- · Description of first aid measures
- · General information

Instantly 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.

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· After inhalation

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

- · After skin contact Instantly wash with water and soap and rinse thoroughly.
- · After eye contact Rinse opened eye for several minutes under running water. Then consult doctor.
- · After swallowing

Do not induce vomiting; instantly call for medical help.

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

Administer medicinal carbon

Rinse out mouth and then drink plenty of water.

- · 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 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents

Water haze

Foam

Fire-extinguishing powder

Carbon dioxide

- · For safety reasons unsuitable extinguishing agents Water with a full water jet.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

- · Advice for firefighters
- · Protective equipment:

Put on breathing apparatus.

Wear full protective suit.

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

### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: Do not allow to enter drainage system, surface or ground water.
- · Methods and material for containment and cleaning up:

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

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 8 for information on personal protection equipment.

### 7 Handling and storage

- · Handling
- Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and containers: 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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· Specific end use(s) No further relevant information available.

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### 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:

108-95-2 phenol (2.5-10%)

OEL Short-term value: 38 mg/m3, 10 ml/m3 Long-term value: 19 mg/m3, 5 ml/m3

- · Additional information: The lists that were valid during the compilation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Keep away from foodstuffs, beverages and food.

Take off immediately all contaminated clothing

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

· Breathing equipment:

Use breathing protection in case of insufficient ventilation.

Filter P3.

· Protection of hands:



Protective gloves.

#### · 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 of a maximum of 15 minutes gloves made of the following materials are suitable:

Nitrile rubber, NBR

- · As protection from splashes gloves made of the following materials are suitable: Nitrile rubber, NBR
- · Eve protection:



Tightly sealed safety glasses.

· Body protection: Protective work clothing.

### 9 Physical and chemical properties

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

Form: Fluid Colour: Light brown

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|---|--|
| · Odour:  | Amine-like   |
| · pH-value at 20℃:  | 11.0   |
| · Change in condition<br>Melting point/Melting range:<br>Boiling point/Boiling range: |  |
| · Flash point:  | 118℃ (Pensky Martin closed cup)                              |
| · Ignition temperature:   | 315.0℃   |
| · Self-inflammability:  | Product is not selfigniting.                                 |
| · Danger of explosion:  | Product is not explosive.                                    |
| · Density at 20℃  | 1.000 g/cm3  |
| · Solubility in / Miscibility with Water:   | Not miscible or difficult to mix                             |
| · Viscosity:<br>dynamic at 20℃:   | 180 mPas   |
| Solvent content: Organic solvents: Water: Other information                           | 0.0 %<br>0.0 %<br>No further relevant information available. |

# 10 Stability and reactivity

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

No decomposition if used according to specifications.

- · 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: Danger of toxic pyrolysis products

## 11 Toxicological information

- Information on toxicological effects
- · Acute toxicity:

| · LD/LC50   | · LD/LC50 values that are relevant for classification: |                  |  |
|-------------|--|------------------|--|
| 140-31-8    | 140-31-8 2-piperazin-1-ylethylamine                    |                  |  |
| Oral        | LD50   | 1470 mg/kg (rat) |  |
| Dermal      | LD50   | 866 mg/kg (rbt)  |  |
| ן 95-95 108 | 108-95-2 phenol  |                  |  |
| Oral        | LD50   | 300 mg/kg (mus)  |  |
| Dermal      | LD50   | 670 mg/kg (rat)  |  |
|             | LC50/4 h   | 316 mg/l (rat)   |  |

- · Primary irritant effect:
- on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- · Sensitization: Sensitization possible by skin contact.
- Additional toxicological information:

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

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Harmful Corrosive Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

# 12 Ecological information

- · Toxicity
- · Acquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow product to reach ground water, water bodies or sewage system.

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

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|-----|---------|-------|-------|-------|
|     |         |       |       |       |

| 08 00 00 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) O<br>COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANT,<br>AND PRINTING INKS |
|---|
|---|

08 04 00 wastes from MFSU of adhesives and sealants (including waterproofing products)

08 04 09 waste adhesives and sealants containing organic solvents or other dangerous substances

- · Uncleaned packagings:
- Recommendation:

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

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|----|------|------|-------|----|-----|
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|    |      |      |       | ~, |     |

| · UN-Number<br>· ADR, IMDG, IATA | UN2735                                     |
|----------------------------------|--|
| · UN proper shipping name        |  |
| · ADR                            | 2735 POLYAMINES, LIQUID, CORROSIVE, N.O.S. |
|                                  | (TRIETHYLENETETRAMINE, N-                  |
|                                  | AMINOETHYLPIPERAZINE)                      |
| · IMDG, IATA                     | POLYAMINES, LIQUID, CORROSIVE, N.O.S.      |
|                                  | (TRIETHYLENETETRAMINE, N-                  |
|                                  | AMINOETHYLPIPERAZINE)                      |

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- · Transport hazard class(es)
- · ADR



· Class 8 Corrosive substances.

· Label 8

· IMDG, IATA



· Class 8 Corrosive substances.

· Label 8

· Packing group

· ADR, IMDG, IATA ///

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Warning: Corrosive substances.

· Kemler Number: 80

• EMS Number: F-A,S-B• Segregation groups Alkalis

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations
- · Technical instructions (air):

| Class | Share in % |
|-------|------------|
| 1     | 4.5        |
| II.   | 11.1       |
| III   | 26.3       |

- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# 16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

R20/22 Harmful by inhalation and if swallowed.

R21 Harmful in contact with skin.

R21/22 Harmful in contact with skin and if swallowed.

R22 Harmful if swallowed.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R34 Causes burns.

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R36/37/38 Irritating to eyes, respiratory system and skin. (Contd. of page 7)

R43 May cause sensitisation by skin contact.

R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in

contact with skin and if swallowed.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

R68 Possible risk of irreversible effects.

· Department issuing data specification sheet: Health, Safety & Environmental department.

· Contact: SIMON RHODES

· \* Data compared to the previous version altered.