

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 16.02.2009

Revision: 11.02.2009

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

- **Product details**
- **Trade name:** EPO 9204 HARDENER
- **Application of the substance / the preparation** Epoxy curing agent
- **Manufacturer/Supplier:** Tgpqrkpg/"Uecpr tqdg"J qwug."Wpk/33"Dwuj g{"Erqug."Qif "Dctp"Ncpq."Mgprg{"."Uwtg{"ET: "7CW/"2425"475"4223"
- **Further information obtainable from:**Tgpqrkpg - "2425"475"4223 - ucrguB tgpqrkpg@q0wm
- **Information in case of emergency:** Tgpqrkpg: 2425"475"4223

2 Hazards identification

- **Hazard description:**



C Corrosive

- **Information concerning particular hazards for human and environment:**
 - R 21/22 Harmful in contact with skin and if swallowed.
 - R 34 Causes burns.
 - R 43 May cause sensitisation by skin contact.
 - R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 9046-10-0	Polyoxyalkyleneamine C, Xn; R 21/22-34	25-50%
CAS: 112-24-3 EINECS: 203-950-6	3,6-diazaoctanethylenediamin C, Xn; R 21-34-43-52/53	10-25%
CAS: 112-57-2 EINECS: 203-986-2	3,6,9-triazaundecamethylenediamine C, Xn, N; R 21/22-34-43-51/53	2.5-10%

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

4 First-aid measures

- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
 - Supply fresh air; consult doctor in case of complaints.
 - In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
 - Immediately wash with water and soap and rinse thoroughly.
 - If skin irritation continues, consult a doctor.
- **After eye contact:**
 - Rinse opened eye for several minutes under running water. Then consult a doctor.

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- **After swallowing:** Do not induce vomiting; call for medical help immediately.

5 Fire-fighting measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Carbon monoxide (CO)
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Person-related safety precautions:** 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.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Protect from heat.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.

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:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists valid during the making were used as basis.

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- **Personal protective equipment:**
- **General protective and hygienic measures:**
*The usual precautionary measures are to be adhered to when handling chemicals.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.*
- **Respiratory protection:** *Not necessary if room is well-ventilated.*
- **Protection of hands:**



Protective gloves

- **Material of gloves**
*Neoprene 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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Safety glasses

Tightly sealed goggles

- **Body protection:** *Protective work clothing*

9 Physical and chemical properties

· General Information

Form: Fluid
Colour: Amber coloured
Odour: Amine-like

· Change in condition

Melting point/Melting range: NA°C
Boiling point/Boiling range: >200°C (DIN 53171)

- **Flash point:** > 100°C (ISO 2719)
- **Ignition temperature:** >300°C (DIN 51 794)
- **Decomposition temperature:** >260°C (DIN 53171)
- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density at 20°C:** 0.97 g/cm³ (ISO 1675:1985)
- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.
- **organic solvents:** Soluble in many organic solvents.

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· **pH-value at 20°C:** >10

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions** Strong exothermic reaction with acids.
- **Dangerous decomposition products:**
Corrosive gases/vapours
Ammonia

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Additional toxicological information:**
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- **Sensitisation** May cause sensitisation by skin contact.

12 Ecological information

- **Information about elimination (persistence and degradability):**
- **Other information:** The product is difficultly biodegradable.
- **Ecotoxic effects:**
- **Remark:** Harmful to fish
- **General notes:**
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Must not reach sewage water or drainage ditch undiluted or unneutralized.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms

13 Disposal considerations

- **Product:**
- **Recommendation**
Dispose of the product by burning in a suitable incinerator or bury in an approved landfill following all applicable local and/or national regulations.

· **European waste catalogue**

20 01 27	paint, inks, adhesives and resins containing dangerous substances
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- **Uncleaned packaging:**
- **Recommendation:**
Empty containers may not be disposed of unless any remaining material adhering to the internal walls has been removed.
Disposal must be made according to official regulations.

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- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 8 Corrosive substances.
- **Danger code (Kemler):** 80
- **UN-Number:** 2735
- **Packaging group:** II
- **Hazard label:** 8
- **Description of goods:** 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxyalkyleneamine, TRIETHYLENETETRAMINE)

- **Maritime transport IMDG:**



- **IMDG Class:** 8
- **UN Number:** 2735
- **Label:** 8
- **Packaging group:** II
- **EMS Number:** F-A,S-B
- **Marine pollutant:** No
- **Proper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxyalkyleneamine, TRIETHYLENETETRAMINE)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 8
- **UN/ID Number:** 2735
- **Label:** 8
- **Packaging group:** II
- **Proper shipping name:** AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxyalkyleneamine, TRIETHYLENETETRAMINE)

15 Regulatory information

- **Labelling according to EU guidelines:**
The product has been marked in accordance with EU Directives / respective national laws.
- **Code letter and hazard designation of product:**
C Corrosive
- **Hazard-determining components of labelling:**
3,6-diazaoctanethylenediamin

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3,6,9-triazaundecamethylenediamine
Polyoxyalkyleneamine

· Risk phrases:

- 21/22 Harmful in contact with skin and if swallowed.
- 34 Causes burns.
- 43 May cause sensitisation by skin contact.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Safety phrases:

- 20 When using do not eat or drink.
- 23 Do not breathe fumes.
- 26 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.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

· National regulations:

- 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

- 21 Harmful in contact with skin.
- 21/22 Harmful in contact with skin and if swallowed.
- 34 Causes burns.
- 43 May cause sensitisation by skin contact.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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