



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

- **Product identifier**
- **Trade name:** *4CR 2820 Reparaturset*
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** *Knife filler/ Surfacers*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*4CR Vertriebsgesellschaft mbH  
Donaustraße 2  
94469 Deggendorf  
Tel.: +49 (0) 4841/665015  
Fax: +49 (0) 4841/665016  
e-Mail: 4cr@b2bmail.eu*
- **Emergency telephone number:** *+49(0)700 24112112 (MIP)*

## 2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
-  *Xn; Harmful*  
R20: *Harmful by inhalation.*
-  *Xi; Irritant*  
R36/38: *Irritating to eyes and skin.*
- R10: *Flammable.*
- **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 according to the latest editions of the EU-lists, and extended by company and literature data.*
- **Label elements**
- **Labelling according to EU guidelines:**  
*The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.*
- **Code letter and hazard designation of product:**  
*Xn Harmful*
- **Hazard-determining components of labelling:**  
*styrene*
- **Risk phrases:**  
10 *Flammable.*  
20 *Harmful by inhalation.*  
36/38 *Irritating to eyes and skin.*
- **Safety phrases:**  
2 *Keep out of the reach of children.*  
9 *Keep container in a well-ventilated place.*  
13 *Keep away from food, drink and animal feedingstuffs.*  
23 *Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).*  
25 *Avoid contact with eyes.*  
46 *If swallowed, seek medical advice immediately and show this container or label.*

(Contd. on page 2)

**Trade name: 4CR 2820 Reparaturset**





(Contd. of page 1)

- **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 substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 100-42-5	styrene	25-50%
EINECS: 202-851-5	 Xn R20;  Xi R36/38 R10  Flam. Liq. 3, H226;  Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	

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

### 4 First aid measures

- **Description of first aid measures**
- **General information:**  
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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
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 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 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 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).

(Contd. on page 3)

**Trade name: 4CR 2820 Reparaturset**

(Contd. of page 2)

- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.
- Do not flush with water or aqueous cleansing agents
- **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.
- **Information about fire - and explosion protection:**
- Keep ignition sources away - Do not smoke.
- Protect against electrostatic charges.
- **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:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Storage class:** 3
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

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

· **Ingredients with limit values that require monitoring at the workplace:**

**100-42-5 styrene**

WEL	Short-term value: 1080 mg/m <sup>3</sup> , 250 ppm
	Long-term value: 430 mg/m <sup>3</sup> , 100 ppm

- **Additional information:** The lists valid during the making 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.
- **Respiratory protection:**
- In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Contd. on page 4)

**Trade name: 4CR 2820 Reparaturset**

(Contd. of page 3)

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 through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

**9 Physical and chemical properties**

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· <b>Form:</b>	Fluid
· <b>Colour:</b>	According to product specification
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	145°C

· **Flash point:** 33°C (DIN 53213)

· **Ignition temperature:** 480°C (DIN 51794)

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

· <b>Lower:</b>	1.2 Vol %
· <b>Upper:</b>	8.9 Vol %

· **Vapour pressure at 20°C:** 6 hPa

· **Density at 20°C:** 1.15 g/cm<sup>3</sup> (DIN 53217)

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

(Contd. on page 5)

**Trade name: 4CR 2820 Reparaturset**

(Contd. of page 4)

- |   |                 |
|---|-----------------|
| · <b>Segregation coefficient (n-octanol/water):</b> Not determined.   |                 |
| · <b>Viscosity:</b>   |                 |
| <b>Dynamic at 20°C:</b>   | 900 mPas        |
| <b>Kinematic:</b>   | Not determined. |
| · <b>Solvent content:</b>   |                 |
| <b>Organic solvents:</b>  | 0.0 %           |
| · <b>Solids content (weight-%):</b> 70.5 %                            |                 |
| · <b>Other information</b> 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:** Carbon monoxide

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

**100-42-5 styrene**

Oral	LD50	5000 mg/kg (rat)
Inhalative	LC50/4 h	24 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant

### 12 Ecological information

- **Toxicity**
- **Aquatic 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 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.

(Contd. on page 6)

**Trade name: 4CR 2820 Reparaturset**

(Contd. of page 5)

- *Danger to drinking water if even small quantities leak into the ground.*
- **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 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.

### 14 Transport information

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



- **ADR/RID class:** 3 (F1) Flammable liquids.
- **Danger code (Kemler):** 39
- **UN-Number:** 3269
- **Packaging group:** III
- **Hazard label:** 3
- **UN proper shipping name:** 3269 POLYESTER RESIN KIT, mixture
- **Tunnel restriction code** E
- **Remarks:** ≤ 450 l: -

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 3269
- **Label** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Proper shipping name:** POLYESTER RESIN KIT, mixture
- **Remarks:** ≤ 30 l: -

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



- **ICAO/IATA Class:** 3

(Contd. on page 7)



**Trade name: 4CR 2820 Reparaturset**

(Contd. of page 6)

- **UN/ID Number:** 3269
- **Label** 3
- **Packaging group:** III
- **Proper shipping name:** POLYESTER RESIN KIT, mixture

- **Special precautions for user** Warning: Flammable liquids.
- **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:**

· **Information about limitation of use:**

100-42-5	styrene	5
----------	---------	---

Class	Share in %
NK	25-50

- **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.*

· **Relevant phrases**

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

R10 Flammable.

R20 Harmful by inhalation.

R36/38 Irritating to eyes and skin.

- **Department issuing MSDS:** Laboratory

- **\* Data compared to the previous version altered.**