

**Safety Data Sheet**  
according to 1907/2006/EC, Article 31

Printing date 25.03.2009

V - 1

Revision: 19.03.2009

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

· **Product details**

· **Trade name:** **CARSYSTEM 2K EPOXY GRUNDIERFÜLLER**

· **Application of the substance / the preparation** *Lacquer*

· **Manufacturer/Supplier:**

*Vosschemie GmbH*

*Esinger Steinweg 50*

*D-25436 Uetersen*

*Phone: +49 4122 717 0 Fax: +49 4122 717158 info@vosschemie.de*

· **Further information obtainable from:**

*Abteilung Labor / +49-4122-717-0*

*s.schaller@vosschemie.de*

· **Information in case of emergency:**

*Giftinformationszentrum (GIZ)-Nord, Goettingen, Deutschland*

*+49-551-19240, +49-551-383180*

### 2 Hazards identification

· **Hazard description:**



*Xn Harmful*

*F+ Extremely 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.*

*Warning! Pressurized container.*

*R 12 Extremely flammable.*

*R 20/21 Harmful by inhalation and in contact with skin.*

*R 36/38 Irritating to eyes and skin.*

*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.*

*Contains epoxy constituents. See information supplied by the manufacturer.*

*Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.*

*Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.*

*Buildup of explosive mixtures possible without sufficient ventilation.*

*Keep out of the reach of children*

· **Classification system:**

*The classification is according to the latest editions of the EU-lists, and extended by company and literature data.*

### 3 Composition/information on ingredients

· **Chemical characterization**

· **Description:** *Mixture of substances listed below with nonhazardous additions.*

· **Dangerous components:**

*CAS: 115-10-6*

*dimethyl ether*

*25-50%*

*EINECS: 204-065-8*

*F+; R 12*

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CAS: 1330-20-7 EINECS: 215-535-7	xylene ☒ Xn, ☒ Xi; R 10-20/21-38	10-25%
CAS: 25068-38-6 NLP: 500-033-5	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) ☒ Xi, ☒ N; R 36/38-43-51/53	10-25%
CAS: 107-98-2 EINECS: 203-539-1	1-methoxy-2-propanol R 10	5-10%
CAS: 71-36-3 EINECS: 200-751-6	butan-1-ol ☒ Xn, ☒ Xi; R 10-22-37/38-41-67	5-10%
CAS: 100-41-4 EINECS: 202-849-4	ethylbenzene ☒ Xn, ☒ F; R 11-20	2.5-<5%
CAS: 123-86-4 EINECS: 204-658-1	n-butyl acetate R 10-66-67	≤2.5%
CAS: 78-83-1 EINECS: 201-148-0	butanol ☒ Xi; R 10-37/38-41-67	≤2.5%
CAS: 110-19-0 EINECS: 203-745-1	isobutyl acetate ☒ F; R 11-66	≤2.5%

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

#### 4 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 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:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

#### 5 Fire-fighting measures

· **Suitable extinguishing agents:** CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:**

Water

Water with full jet

· **Protective equipment:** Mouth respiratory protective device.

· **Additional information**

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

#### 6 Accidental release measures

· **Person-related safety precautions:**

Keep away from ignition sources.

Ensure adequate ventilation

Do not inhale gases / fumes / aerosols.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Avoid contact with the eyes and skin.

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*Wear protective equipment. Keep unprotected persons away.*

**Measures for environmental protection:**

*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.*

**Measures for cleaning/collecting:**

*Dispose contaminated material as waste according to item 13.*

*Ensure adequate ventilation.*

*Do not flush with water or aqueous cleansing agents*

## 7 Handling and storage

**Handling:**

**Information for safe handling:**

*Keep away from heat and direct sunlight.*

*Do not inhale gases / fumes / aerosols.*

*Avoid contact with the eyes and skin.*

*Ensure good ventilation/exhaustion at the workplace.*

*Open and handle receptacle with care.*

**Information about fire - and explosion protection:**

*Do not spray onto a naked flame or any incandescent material.*

*Fumes can combine with air to form an explosive mixture.*

*Keep ignition sources away - Do not smoke.*

*Protect against electrostatic charges.*

**Storage:**

**Requirements to be met by storerooms and receptacles:**

*Store in a cool location.*

*Observe official regulations on storing packagings with pressurized containers.*

**Information about storage in one common storage facility:** *Store away from foodstuffs.*

**Further information about storage conditions:**

*Keep container tightly sealed.*

*Do not seal receptacle gas tight.*

*Store in cool, dry conditions in well sealed receptacles.*

*Protect from heat and direct sunlight.*

## 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:**

**115-10-6 dimethyl ether**

WEL (Great Britain) Short-term value: 958 mg/m<sup>3</sup>, 500 ppm

Long-term value: 766 mg/m<sup>3</sup>, 400 ppm

IOELV (EU)

Long-term value: 1920 mg/m<sup>3</sup>, 1000 ppm

**1330-20-7 xylene**

WEL (Great Britain) Short-term value: 441 mg/m<sup>3</sup>, 100 ppm

Long-term value: 220 mg/m<sup>3</sup>, 50 ppm

Sk; BMGV

IOELV (EU)

Short-term value: 442 mg/m<sup>3</sup>, 100 ppm

Long-term value: 221 mg/m<sup>3</sup>, 50 ppm

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**107-98-2 1-methoxy-2-propanol**

WEL (Great Britain)	Short-term value: 560 mg/m <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm Sk
IOELV (EU)	Short-term value: 568 mg/m <sup>3</sup> , 150 ppm Long-term value: 375 mg/m <sup>3</sup> , 100 ppm Skin

**71-36-3 butan-1-ol**

WEL (Great Britain)	Short-term value: 154 mg/m <sup>3</sup> , 50 ppm Sk
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**100-41-4 ethylbenzene**

WEL (Great Britain)	Short-term value: 552 mg/m <sup>3</sup> , 125 ppm Long-term value: 441 mg/m <sup>3</sup> , 100 ppm
IOELV (EU)	Short-term value: 884 mg/m <sup>3</sup> , 200 ppm Long-term value: 442 mg/m <sup>3</sup> , 100 ppm Skin

**123-86-4 n-butyl acetate**

WEL (Great Britain)	Short-term value: 966 mg/m <sup>3</sup> , 200 ppm Long-term value: 724 mg/m <sup>3</sup> , 150 ppm
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**78-83-1 butanol**

WEL (Great Britain)	Short-term value: 231 mg/m <sup>3</sup> , 75 ppm Long-term value: 154 mg/m <sup>3</sup> , 50 ppm
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**110-19-0 isobutyl acetate**

WEL (Great Britain)	Short-term value: 903 mg/m <sup>3</sup> , 187 ppm Long-term value: 724 mg/m <sup>3</sup> , 150 ppm
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· **Additional information:** The lists valid during the making were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

- Do not eat, drink, smoke or sniff while working.
- 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:**

To avoid skin problems reduce the wearing of gloves to the required minimum.  
Check the permeability prior to each renewed use of the glove.



Protective gloves

**Solvent resistant 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

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- **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

- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

- **General Information**

<b>Form:</b>	Aerosol
<b>Colour:</b>	Grey
<b>Odour:</b>	Characteristic

- **Change in condition**

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** Not applicable, as aerosol.

- **Flash point:** Not applicable, as aerosol.

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

- **Danger of explosion:** In use, may form flammable/explosive vapour-air mixture.

- **Explosion limits:**

<b>Lower:</b>	1.1 Vol %
<b>Upper:</b>	18.6 Vol %

- **Vapour pressure at 20°C:** 5200 hPa

- **Density at 20°C:** 1.22 g/cm<sup>3</sup>

- **Solubility in / Miscibility with**

**water:** Not miscible or difficult to mix.  
**VOC (EC)** 2004/42/IIIB (e) (840) <770

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

- **Dangerous reactions** No dangerous reactions known.

- **Dangerous decomposition products:** No dangerous decomposition products known.

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### 11 Toxicological information

· **Acute toxicity:**

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

**115-10-6 dimethyl ether**

Inhalative	LC50/4 h	308 mg/l (rat)
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**1330-20-7 xylene**

Oral	LD50	4300 mg/kg (rat)
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Dermal	LD50	2000 mg/kg (rabbit)
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**25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq$  700)**

Oral	LD50	> 5000 mg/kg (rat)
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**71-36-3 butan-1-ol**

Oral	LD50	790 mg/kg (rat)
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Dermal	LD50	3400 mg/kg (rabbit)
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Inhalative	LC50/4 h	8000 mg/l (rat)
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· **Primary irritant effect:**

· **on the skin:** Irritant to skin and mucous membranes.

· **on the eye:** Irritating effect.

· **Additional toxicological information:**

Vapours may cause drowsiness and dizziness.

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

· **Sensitisation** May cause sensitisation by skin contact.

### 12 Ecological information

· **Ecotoxicological effects:**

· **Aquatic toxicity:**

**25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq$  700)**

EC50/48h	2.8 mg/l (daphnia)
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LC50/96h	3.6 mg/l (leuciscus idus))
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· **Remark:** Harmful to fish

· **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.

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

Harmful to aquatic organisms

### 13 Disposal considerations

· **Product:**

· **Recommendation**

Disposal must be made according to official regulations.

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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
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15 01 04	metallic packaging
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· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

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



- **ADR/RID class:** 2 5F Gases.
- **Danger code (Kemler):** 23
- **UN-Number:** 1950
- **Packaging group:** -
- **Hazard label:** 2.1
- **Description of goods:** 1950 AEROSOLS

· **Maritime transport IMDG:**



- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** No
- **Proper shipping name:** AEROSOLS

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



- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **Proper shipping name:** AEROSOLS, flammable

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**15 Regulatory information****· 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  
F+ Extremely flammable

**· Hazard-determining components of labelling:**

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq$  700)  
xylene

**· Risk phrases:**

In use, may form flammable/explosive vapour-air mixture.

12 Extremely flammable.

20/21 Harmful by inhalation and in contact with skin.

36/38 Irritating to eyes and skin.

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:**

2 Keep out of the reach of children.

23 Do not breathe aerosol.

25 Avoid contact with eyes.

29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

46 If swallowed, seek medical advice immediately and show this container or label.

51 Use only in well-ventilated areas.

**· Special labelling of certain preparations:**

Contains epoxy constituents. See information supplied by the manufacturer.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

Keep out of the reach of children

**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**

10 Flammable.

11 Highly flammable.

12 Extremely flammable.

20 Harmful by inhalation.

20/21 Harmful by inhalation and in contact with skin.

22 Harmful if swallowed.

36/38 Irritating to eyes and skin.

37/38 Irritating to respiratory system and skin.

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- 38 *Irritating to skin.*
- 41 *Risk of serious damage to eyes.*
- 43 *May cause sensitisation by skin contact.*
- 51/53 *Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*
- 66 *Repeated exposure may cause skin dryness or cracking.*
- 67 *Vapours may cause drowsiness and dizziness.*

· **Department issuing MSDS:** Abteilung Labor

· **Contact:** Frau S. Schaller

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