

## Safety Data Sheet

Printing date 24.06.2008

Revision: 24.06.2008

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

· **Product details**

· **Trade name:** Resin solution X 50

· **Article number:** 1234567890

· **Application of the substance / the preparation** Raw material for resins

· **Manufacturer/Supplier:**

Chemix GmbH  
Chemixstrasse 17  
A-5020 Salzburg

Tel.: 0043/662/21 22 23  
Email: peter.mayer@chemix.com

· **Further information obtainable from:** Product safety department.

· **Information in case of emergency:**

During normal opening times (8 am till 5:30 pm): environment protection department, Ext 123  
at other times: factory fire brigade, Ext 222

### 2 Hazards identification

· **Hazard description:**



Xn Harmful  
N Dangerous for the 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.

R 10 Flammable.

R 36/38 Irritating to eyes and skin.

R 43 May cause sensitisation by skin contact.

R 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 63 Possible risk of harm to the unborn child.

R 65 Harmful: may cause lung damage if swallowed.

R 67 Vapours may cause drowsiness and dizziness.

Contains epoxy constituents. See information supplied by the manufacturer.

· **Safety phrases:**

2 Keep out of the reach of children.

13 Keep away from food, drink and animal feedingstuffs.

24/25 Avoid contact with skin and eyes.

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

37 Wear suitable gloves.

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

· **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.

(Contd. on page 2)

## Safety Data Sheet

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: Resin solution X 50**

(Contd. of page 1)

· <b>Dangerous components:</b>		
25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight $\leq 700$ ) ☒ Xi, ☒ N; R 36/38-43-51/53	25-50%
108-88-3	toluene ☒ Xn, ☒ Xi, ☒ F; R 11-38-48/20-63-65-67	10-25%
141-78-6	ethyl acetate ☒ Xi, ☒ F; R 11-36-66-67	10-25%
78-92-2	butanol ☒ Xi; R 10-36/37-67	2.5-10%
67-63-0	propan-2-ol ☒ Xi, ☒ F; R 11-36-67	2.5-10%

 · **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:** If symptoms persist consult doctor.

### 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 with full jet

 · **Protective equipment:** No special measures required.

### 6 Accidental release measures

 · **Person-related safety precautions:** 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:**

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

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

AUS

(Contd. on page 3)

# Safety Data Sheet

Printing date 24.06.2008

Revision: 24.06.2008

Trade name: Resin solution X 50

(Contd. of page 2)

## 7 Handling and storage

- **Handling:**
- **Information 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.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.

## 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:**

### 108-88-3 toluene

NES	Short-term value: 574 mg/m <sup>3</sup> , 150 ppm
	Long-term value: 191 mg/m <sup>3</sup> , 50 ppm
Sk	

### 141-78-6 ethyl acetate

NES	Short-term value: 1440 mg/m <sup>3</sup> , 400 ppm
	Long-term value: 720 mg/m <sup>3</sup> , 200 ppm

### 78-92-2 butanol

NES	303 mg/m <sup>3</sup> , 100 ppm
-----	---------------------------------

### 67-63-0 propan-2-ol

NES	Short-term value: 1230 mg/m <sup>3</sup> , 500 ppm
	Long-term value: 983 mg/m <sup>3</sup> , 400 ppm

- **Additional information:** The lists valid during the making were used as basis.
- **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.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/  
the chemical mixture.

(Contd. on page 4)

## Safety Data Sheet

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: Resin solution X 50**

(Contd. of page 3)

*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

· **General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	According to product specification
<b>Odour:</b>	Characteristic

· **Change in condition**

**Melting point/Melting range:** Undetermined.  
**Boiling point/Boiling range:** 77°C

· **Flash point:** 26°C

· **Ignition temperature:** 390°C

· **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>	11.5 Vol %

· **Vapour pressure at 20°C:** 97 hPa

· **Density at 20°C:** 0.93 g/cm<sup>3</sup>

· **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

· **Solvent content:**

<b>Organic solvents:</b>	50.0 %
--------------------------	--------

<b>Solids content:</b>	50.0 %
------------------------	--------

### 10 Stability and reactivity

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

· **Dangerous reactions** No dangerous reactions known.

(Contd. on page 5)

# Safety Data Sheet

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: Resin solution X 50**

(Contd. of page 4)

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

## 11 Toxicological information

· **Acute toxicity:**

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

### 108-88-3 toluene

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h	5320 mg/l (mouse)

· **Primary irritant effect:**

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

· **on the eye:** Irritating effect.

· **Sensitization:** Sensitization possible through skin contact.

· **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:

Irritant

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

## 12 Ecological information

· **Ecotoxicological effects:**

· **Remark:** Toxic for 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.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

## 13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packaging:**

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

## 14 Transport information

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



· **ADR/RID class:** 3 Flammable liquids.

· **Danger code (Kemler):** 30

(Contd. on page 6)

## Safety Data Sheet

Printing date 24.06.2008

Revision: 24.06.2008

Trade name: Resin solution X 50

(Contd. of page 5)

- **UN-Number:** 1866
- **Packaging group:** III
- **Hazard label:** 3
- **Description of goods:** 1866 RESIN SOLUTION, special provision 640E

· **Maritime transport IMDG:**

- **IMDG Class:** 3
- **UN Number:** 1866
- **Label:** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-E
- **Marine pollutant:** No
- **Proper shipping name:** RESIN SOLUTION

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

- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1866
- **Label:** 3
- **Packaging group:** III
- **Proper shipping name:** RESIN SOLUTION

### 15 Regulatory information

· **Australian Inventory of Chemical Substances**

All ingredients are listed.

· **Standard for the Uniform Scheduling of Drugs and Poisons**

108-88-3 toluene

S6

· **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  
N Dangerous for the environment· **Hazard-determining components of labelling:**reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight  $\leq 700$ )  
toluene· **Risk phrases:**10 Flammable.  
36/38 Irritating to eyes and skin.  
43 May cause sensitisation by skin contact.  
48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

(Contd. on page 7)

AUS

## Safety Data Sheet

Printing date 24.06.2008

Revision: 24.06.2008

**Trade name: Resin solution X 50**

(Contd. of page 6)

- 63 Possible risk of harm to the unborn child.
- 65 Harmful: may cause lung damage if swallowed.
- 67 Vapours may cause drowsiness and dizziness.

· **Safety phrases:**

- 2 Keep out of the reach of children.
- 13 Keep away from food, drink and animal feedingstuffs.
- 24/25 Avoid contact with skin and eyes.
- 29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
- 37 Wear suitable gloves.
- 46 If swallowed, seek medical advice immediately and show this container or label.

· **Special labelling of certain preparations:**

Contains epoxy constituents. See information supplied by the manufacturer.

### 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.
- 36 Irritating to eyes.
- 36/37 Irritating to eyes and respiratory system.
- 36/38 Irritating to eyes and skin.
- 38 Irritating to skin.
- 43 May cause sensitisation by skin contact.
- 48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 63 Possible risk of harm to the unborn child.
- 65 Harmful: may cause lung damage if swallowed.
- 66 Repeated exposure may cause skin dryness or cracking.
- 67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Product safety department.

· **Contact:** Dr. Peter Mayer