

Printing date 03/18/2004

Reviewed on 03/18/2004

1 Identification of substance

- Product details
- Trade name: **Curl T**
- Application of the substance / the preparation Sealing compound
- Manufacturer/Supplier:
ElringKlinger AG
Max-Eyth-Straße 2
D-72581 Dettingen/Erms
- Information department: 2ZEW Tel.: ++49/(0)7123/724-253
- Emergency information: Tel.: ++49/(0)7123/724-0

2 Composition/Data on components

- Chemical characterization
- Description: Plastic Polyurethane, solved in Ethanol/Ethyl acetate/Special fuel

Dangerous components:

64-17-5	ethanol	F; R 11	10-25%
	Naphtha (petroleum), hydrotreated light	Xn, F, N; R 11-38-51/53-65-67	10-25%
141-78-6	ethyl acetate	Xi, F; R 11-36-66-67	2.5-10%
68410-23-1	Polyaminoamid	Xi; R 41	<2%
8006-64-2	Turpentine, oil	Xn, N; R 10-20/21/22-36/38-43-51/53-65	<0.2%
108-90-7	chlorobenzene	Xn, N; R 10-20-51/53	<0.15%

3 Hazards identification

Hazard description:



F Highly flammable

Information pertaining to particular dangers for man 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.

Highly flammable.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Vapours may cause drowsiness and dizziness

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

NFPA ratings (scale 0 - 4)



Health = 3

Fire = 3

Reactivity = 0

WHMIS-ratings (scale 0 - 4)



Health = 3

Fire = 3

REACTIVITY 0

Reactivity = 0

4 First aid measures

General information:

Take affected persons out into the fresh air.

Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Wash with water and soap.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Call a doctor immediately.

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Rinse out mouth and then drink plenty of water.

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5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing 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 material, its products of combustion or resulting gases:**
In case of fire, the following can be released:
Nitrogen oxides (NO_x)
Carbon monoxide (CO)
In certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:
Isocyanate (Vapours)
Hydrogen cyanide (HCN)
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Keep away from ignition sources
Ensure adequate ventilation
- **Measures for environmental protection:** Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Pick up mechanically.
Dispose of the collected material according to regulations.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Use solvent-proof equipment.
- **Information about protection against explosions and fires:**
Use only in explosion protected area.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Fumes can combine with air to form an explosive mixture.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Provide solvent resistant, sealed floor.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Store receptacle in a well ventilated area.

8 Exposure controls and personal protection

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

- **Components with limit values that require monitoring at the workplace:**

64-17-5 ethanol	
PEL (USA)	1900 mg/m ³ , 1000 ppm
REL (USA)	1900 mg/m ³ , 1000 ppm
TLV (USA)	1880 mg/m ³ , 1000 ppm

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I41-78-6 ethyl acetate

PEL (USA)	1400 mg/m ³ , 400 ppm
REL (USA)	1400 mg/m ³ , 400 ppm
TLV (USA)	1440 mg/m ³ , 400 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Do not smoke while working.

Do not eat or drink while working.

Wash hands before breaks and at the end of work.

· **Breathing equipment:**

Use suitable respiratory protective device in case of insufficient ventilation.

Under the following conditions a respirator may be required:

When product vapor concentration exceeds the limits listed in section 8.

Short term filter device:

Filter A

· **Protection of hands:** Solvent resistant gloves

· **Material of gloves**

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

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

9 Physical and chemical properties

· **General Information**

Form:	Pasty
Color:	Green
Odor:	Product specific

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: 80-120°C (176-248°F)

· **Flash point:** -5°C (23°F)

· **Ignition temperature:** 250°C (482°F)

· **Auto igniting:** Product is not selfigniting.

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

· **Explosion limits:**

Lower:	1.0 Vol %
Upper:	15.0 Vol %

· **Vapor pressure at 20°C (68°F):** 31 hPa (23 mm Hg) (prEN 13016-1)

· **Density at 20°C (68°F):** 1.00 g/cm³

· **Solubility in / Miscibility with**

Water: Partly soluble.

· **Viscosity:**

Dynamic at 20°C (68°F): ca. 30000 mPas

10 Stability and reactivity

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

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- **Dangerous reactions**
Reacts with alkaline metals.
Reacts with earth alkaline metals.
Reacts with strong oxidizing agents.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

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

Naphtha (petroleum), hydrotreated light

Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5 mg/l (rat)

· **Primary irritant effect:**

- on the skin: No irritant effect.
- on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.

· **Additional toxicological information:**

Inhalation of concentrated vapors as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.

12 Ecological information

· **General notes:**

At present there are no ecotoxicological assessments.

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

· **Product:**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Take to special waste combustion plant.

· **Uncleaned packagings:**

· **Recommendation:**

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.
Non contaminated packagings can be used for recycling.

14 Transport information

· **DOT regulations:**



- **Hazard class:** 3
- **Identification number:** UN1866
- **Packing group:** III
- **Proper shipping name (technical name):** RESIN SOLUTION
- **Label:** 3

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



· ADR/RID class: 3 (F1) Flammable liquids
· Danger code (Kemler): 33
· UN-Number: 1866
· Packaging group: III

· 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 Regulations

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

108-90-7 chlorobenzene

· TSCA (Toxic Substances Control Act):

64-17-5 ethanol

Naphtha (petroleum), hydrotreated light

141-78-6 ethyl acetate

7631-86-9 silicon dioxide, chemically prepared

123-86-4 n-butyl acetate

8006-64-2 Turpentine, oil

108-90-7 chlorobenzene

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity:

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

108-90-7 chlorobenzene D

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

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· **TLV (Threshold Limit Value established by ACGIH)**

64-17-5 ethanol A4

108-90-7 chlorobenzene A3

· **MAK (German Maximum Workplace Concentration)**

64-17-5 ethanol 5

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**



F Highly flammable

· **Risk phrases:**

Highly flammable.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Vapours may cause drowsiness and dizziness

· **Safety phrases:**

Keep out of the reach of children.

Keep container tightly closed and in a well-ventilated place.

Keep away from sources of ignition - No smoking.

Do not breathe fumes

Avoid contact with skin.

Use only in well-ventilated areas.

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
III	10-25
NK	25-50

· **Water hazard class:** Water hazard class I (Self-assessment): slightly 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.

· **Department issuing MSDS:** 2ZEW

· **Contact:** Mr. Anhorn

· *** Data compared to the previous version altered.**