

Material Safety Data Sheet

acc. to ISO/DIS 11014





Printing date 12/07/2010

Reviewed on 03/18/2009

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

- **Product identifier**
- **Trade name:** *Curil*
- **Article number:** 035.971/036.005/036.080/036.099/036.048/036.064
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** *Sealing compound*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
*ElringKlinger AG
 Max-Eyth-Straße 2
 D-72581 Dettingen/Erms
 Germany*
- **Information department:**
*2SEW Tel.: ++49(0)7123/724-253
 E-mail: sdb@elringklinger.de*
- **Emergency telephone number:** *Tel.: ++49(0)7123/724-0 (8.00 - 16.00 CET)*

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
-  **Irritant**
Irritating to eyes. May cause sensitization by skin contact.
-  **Highly flammable**
*Highly flammable.
 Vapours may cause drowsiness and dizziness.*
- **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.
 Has a narcotizing effect.*
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **Label elements**
- **Labelling according to EU guidelines:**
The product has been classified and marked in accordance with directives on hazardous materials.
- **Code letter and hazard designation of product:**
- 

*Xi Irritant
 F Highly flammable*
- **Hazard-determining components of labelling:**
formaldehyde
- **Risk phrases:**
*Highly flammable.
 Irritating to eyes.
 May cause sensitization by skin contact.
 Vapours may cause drowsiness and dizziness*
- **Safety phrases:**
*Keep out of the reach of children.
 Keep away from sources of ignition - No smoking.
 Avoid contact with skin and eyes.
 Wear suitable gloves.
 Use only in well-ventilated areas.
 Dispose of this material and its container at hazardous or special waste collection point*

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **WHMIS-ratings (scale 0 - 4)**



- **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 modified phenolic resins, dissolved in ethanol/ethylacetate

- **Dangerous components:**

141-78-6	ethyl acetate	Xi R36; F R11 R66-67 GHS02 H225; GHS07 H319; H336	10-25%
64-17-5	ethanol	F R11 GHS02 H225	10-25%
71-36-3	butan-1-ol	Xn R22; Xi R37/38-41 R10-67 GHS02 H226; GHS05 H315; H318; GHS07 H302; H335+H336	2.5-10%
50-00-0	formaldehyde	T R23/24/25; C R34; Xn R40; Xi R43 GHS06 H301; H311; H331; H317; GHS08 H351; GHS05 H314	<1%

4 First aid measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:**
Take affected persons into fresh air and keep quiet.
Seek medical treatment 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.
- **After swallowing:**
Call a doctor immediately.
Rinse out mouth and then drink plenty of water.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
Headache
Dizziness
Dizziness

5 Firefighting measures

- **Extinguishing media**
- **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

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- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
 Carbon monoxide (CO)
 Formaldehyde
 Phenol
In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Advice for firefighters**
- **Protective equipment:**
 Wear self-contained respiratory protective device.
 Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
 Keep away from ignition sources
 Ensure adequate ventilation
 Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
 Do not allow to penetrate the ground/soil.
 Do not allow to enter sewers/ surface or ground water.
 Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
 Ensure adequate ventilation.
 Dispose of the collected material according to regulations.
- **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**
 Keep receptacles tightly sealed.
 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:**
 Highly volatile, flammable constituents are released during processing.
 Keep ignition sources away - Do not smoke.
 Protect against electrostatic charges.
 Fumes can combine with air to form an explosive mixture.
- **Conditions for safe storage, including any incompatibilities**
- **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:** Store away from foodstuffs.
- **Further information about storage conditions:**
 Store in cool, dry conditions in well sealed receptacles.
 Store receptacle in a well ventilated area.

8 Exposure controls/personal protection

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

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· **Control parameters**· **Components with limit values that require monitoring at the workplace:****141-78-6 ethyl acetate**PEL 1400 mg/m³, 400 ppmREL 1400 mg/m³, 400 ppmTLV 1440 mg/m³, 400 ppm**64-17-5 ethanol**PEL 1900 mg/m³, 1000 ppmREL 1900 mg/m³, 1000 ppmTLV 1880 mg/m³, 1000 ppm**71-36-3 butan-1-ol**PEL 300 mg/m³, 100 ppmREL Short-term value: C 150 mg/m³, C 50 ppm

Skin

TLV 61 mg/m³, 20 ppm**50-00-0 formaldehyde**

PEL Short-term value: 2 ppm

Long-term value: 0.75 ppm

see 29 CFR 1910.1048

REL Short-term value: C 0.1* ppm

Long-term value: 0.016 ppm

*15-min

TLV Short-term value: C 0.37 mg/m³, C 0.3 ppm

SEN

· **Additional information:** The lists that were valid during the creation were used as basis.· **Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Do not eat, drink, smoke or sniff while working.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **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.

· **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.

· **Not suitable are gloves made of the following materials:**

Natural rubber, NR

Nitrile rubber, NBR

PVC gloves

· **Eye protection:** Tightly sealed goggles· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**· **General Information**· **Appearance:****Form:** Viscous

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Color:	Brown
Odor:	Solvent-like
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	76°C (169°F)
Flash point:	-1°C (30°F)
Ignition temperature:	340°C (644°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:	2.1 Vol %
Upper:	15.0 Vol %
Vapor pressure at 20°C (68°F):	79 hPa (59 mm Hg) (prEN 13016-1)
Density at 20°C (68°F):	ca. 1.0 g/cm ³
Solubility in / Miscibility with Water:	Partly soluble.
Viscosity:	
Dynamic at 20°C (68°F):	2000 - 4000 mPas

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomized.
- **Hazardous decomposition products:**
Carbon monoxide
Carbon dioxide
Nitrogen oxides (NO_x)
Formaldehyde
In case of fire: see section 5

11 Toxicological information

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

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

50-00-0 formaldehyde

Oral	LD50	>200 mg/kg (rat)
------	------	------------------

64-17-5 ethanol

Oral	LD50	3450 mg/kg (mouse)
		7060 mg/kg (rat)
Dermal	LD50	4070 mg/kg (rabbit)
Inhalative	LC50/10h	37.68 mg/l (rat)
	LC50/4 h	20000 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant effect is possible
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

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Irritant

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12 Ecological information

· Toxicity

· Aquatic toxicity:

64-17-5 ethanol

EC50/48h	9268 mg/l (water-fly)
LC 50	8150 mg/l (leuciscus idus)
LC50/96h	14200 mg/l (Pimephales promelas)

· Additional ecological information:

· General notes:

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.

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

13 Disposal considerations

· Waste treatment methods

· Recommendation:

Take to special waste combustion plant.

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

· Uncleaned packagings:

· Recommendation:

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

14 Transport information

· DOT regulations:



· Hazard class:

3

· Identification number:

UN1866

· Packing group:

III

· Proper shipping name (technical name):

RESIN SOLUTION

· Label

3

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



· ADR/RID class:

3 (F1) Flammable liquids

· Danger code (Kemler):

33

· UN-Number:

1866

· Packaging group:

III

· UN proper shipping name:

1866 RESIN SOLUTION

· Maritime transport IMDG:



· IMDG Class:

3

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

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

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

· **Special precautions for user** Warning: Flammable liquids

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

50-00-0 formaldehyde

· **Section 313 (Specific toxic chemical listings):**

71-36-3 butan-1-ol

50-00-0 formaldehyde

80-05-7 bisphenol A

108-88-3 toluene

1330-20-7 xylene, mixed isomers, pure

78-93-3 butanone

· **TSCA (Toxic Substances Control Act):**

141-78-6 ethyl acetate

64-17-5 ethanol

71-36-3 butan-1-ol

68611-44-9 Hydrophobe pyrogene Kieselsäure

7732-18-5 water, distilled, conductivity or of similar purity

50-00-0 formaldehyde

80-05-7 bisphenol A

108-88-3 toluene

1330-20-7 xylene, mixed isomers, pure

78-93-3 butanone

· **Proposition 65**· **Chemicals known to cause cancer:**

50-00-0 formaldehyde

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

64-17-5 ethanol

108-88-3 toluene

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· **Canadian Ingredient disclosure list**

· **Limit 0,1%:**

ethanol

formaldehyde

· **Limit 1%:**

ethyl acetate

butan-1-ol

· **Carcinogeny categories**

· **EPA (Environmental Protection Agency)**

71-36-3 butan-1-ol

D

108-88-3 toluene

D

1330-20-7 xylene, mixed isomers, pure

D

78-93-3 butanone

D

· **IARC (International Agency for Research on Cancer)**

50-00-0 formaldehyde

2A

108-88-3 toluene

3

1330-20-7 xylene, mixed isomers, pure

3

108-05-4 vinyl acetate

2B

· **NTP (National Toxicology Program)**

50-00-0 formaldehyde

R

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

64-17-5 ethanol

A4

108-88-3 toluene

A4

1330-20-7 xylene, mixed isomers, pure

A4

108-05-4 vinyl acetate

A3

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

64-17-5 ethanol

5

108-05-4 vinyl acetate

3

· **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:**



Xi Irritant

F Highly flammable

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

formaldehyde

· **Risk phrases:**

Highly flammable.

Irritating to eyes.

May cause sensitization by skin contact.

Vapours may cause drowsiness and dizziness

· **Safety phrases:**

Keep out of the reach of children.

Keep away from sources of ignition - No smoking.

Avoid contact with skin and eyes.

Wear suitable gloves.

Use only in well-ventilated areas.

Dispose of this material and its container at hazardous or special waste collection point

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*· National regulations:**· Technical instructions (air):*

Class	Share in %
I	< 2,5
NK	25-50

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

*· Department issuing MSDS: 2SEW**· Contact: Mr. Anhorn**· * Data compared to the previous version altered.*