

Material Safety Data Sheet

acc. to ISO/DIS 11014


Printing date 06/15/2011

Reviewed on 06/14/2011

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

- **Product identifier**
- **Trade name:** Dirko transparent/Aminosilan
- **Elring article number:** 216.917/249.585
- **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 and skin.
- **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 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

- **Risk phrases:**
Irritating to eyes and skin.
- **Safety phrases:**
Avoid contact with skin.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing, gloves and eyeface protection.
If swallowed, seek medical advice immediately and show this container or label.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 1
Reactivity = 0

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



HEALTH 1 Health = 1
FIRE 1 Fire = 1
REACTIVITY 0 Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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Trade name: **Dirko transparent/Aminosilan**· **vPvB:** Not applicable.

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3 Composition/information on ingredients

- **Chemical characterization:** Mixtures
- **Description:** Polydimethylsiloxane with inorganic filler and Aminosilane-curative.

- **Dangerous components:**

15901-40-3	N,N',N''-tricyclohexyl-1-methylsilanetriamine	C R35; Xn R21/22 H301; H311; H314; H318	2.5-10%
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4 First aid measures

- **Description of first aid measures**
- **General information:** Take affected persons out into the fresh air.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Remove from the skin using a cloth or paper. Then clean with water and soap.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Seek immediate medical advice.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Use fire fighting measures that suit the environment.
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:**
Pick up mechanically.
Ensure adequate ventilation.
Dispose of the collected material according to regulations.
- **Reference to other sections** By-products are released by a reaction with atmospherical humidity. See chapter 8.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **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:** Not required.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.

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* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **CAS No. Designation of material % Type Value Unit**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
While curing the following substances are formed and released by a reaction with atmospheric humidity:

CAS-Nr.	Designation of material	%	Type	Value	Unit
108-91-8	cyclohexylamine	ca.4%	REL	40mg/m ³ , 10ppm	
			TLV	41mg/m ³ , 10ppm	
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:** Protective gloves
- **Material of gloves**
Butyl rubber, BR
Nitrile rubber, NBR
Natural rubber, NR
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Pasty
Color:	According to product specification
Odor:	Amine-like
- **Change in condition**
Boiling point/Boiling range: Not applicable
- **Flash point:** >150°C (>302 °F)
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density at 20°C (68 °F):** ca. 1.03 g/cm³
- **Solubility in / Miscibility with Water:** Not miscible or difficult to mix.

* 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.

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- **Hazardous decomposition products:**
None if stored according to specifications.
>150°C:
Small quantities of formaldehyde may be formed.

11 Toxicological information

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

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

108-91-8 cyclohexylamine

Oral	LD50	156 mg/kg (rat)
Dermal	LD50	277 mg/kg (rabbit)

- **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 internally approved calculation methods for preparations:
Irritant

12 Ecological information

- **Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability**
- **Other information:** The product isn't biodegradable.
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Not cured product may not be disposed off together with household waste and may not reach sewing system. To dispose off open product containers and let them stand at open air until the reaction is finished totally (means there is no more smell). After that waste can be disposed off as the cured product. Cured product can be deposited together with domestic waste. Observe the specific related regulations of local authorities.
- **Uncleaned packagings:**
- **Recommendation:**
Packaging is to be completely emptied (without residue) and with the observance of national regulations. This is preferably accomplished through recycling or reutilization.

14 Transport information

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

· **ADR/RID class:** -

- **Maritime transport IMDG:**

· **IMDG Class:** -

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

· **ICAO/IATA Class:** -

- **Special precautions for user** Not applicable.

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· **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **Sara**· **Section 355 (extremely hazardous substances):**

108-91-8 cyclohexylamine

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

108-88-3 toluene

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

All ingredients are listed.

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

None of the ingredients is listed.

· **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:**

108-88-3 toluene

· **Canadian Ingredient disclosure list**· **Limit 0,1%:**

cyclohexylamine

· **Limit 1%:**

None of the ingredients is listed.

· **Carcinogenity categories**· **EPA (Environmental Protection Agency)**

108-88-3 toluene

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

108-88-3 toluene

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· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

108-91-8 cyclohexylamine

A4

108-88-3 toluene

A4

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

None of the ingredients is listed.

· **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

· **Risk phrases:**

Irritating to eyes and skin.

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· **Safety phrases:**

Avoid contact with skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing, gloves and eyeface protection.

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

· **National regulations:**

If nothing other is noted, the following remarks refer to regulations of the Federal Republic of Germany.

· **Technical instructions (air):**

Class	Share in %
NK	< 2,5

· **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

The safety data sheet shows the essential physical, toxicological, ecological and safety data of this product as well as it gives recommendations for a safe handling e.g. at storage, usage and transport. The appropriate information shall be used to protect people and environment. These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. The consignee of our products must observe existing laws and regulations in his own responsibility even if these are not mentioned in this safety data sheet.

· **Department issuing MSDS:** 2SEW

· **Contact:** Mr. Anhorn

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