

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - Germany



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance/preparation

Product name or Trade name :

Biresin® CH93-2 Hardener (B)

Use of the substance/preparation : Chemical product for construction and industry

Company/undertaking identification

Manufacturer/Distributor : Sika Deutschland GmbH

Street/postbox : Kornwestheimer Str. 103-107

Town/City and Post Code : 70439 Stuttgart

Country : Germany

Telephone no. : +4971180090

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e-mail address of person responsible for this SDS : EHS@de.sika.com

Emergency telephone number : +49-(0)173-6774799 (Only out of office hour)

2. HAZARDS IDENTIFICATION

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Repr. Cat. 3; R62
Xn; R21
C; R34
R43
N; R50/53

Human health hazards : Possible risk of impaired fertility. Harmful in contact with skin. Causes burns. May cause sensitisation by skin contact.

Environmental hazards : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical family/ : Modified polyamine
Characteristics

Ingredient name	CAS number	%	EC number	Classification
3,6,9,12-tetra-azatetradecamethylenediamine	4067-16-7	35-50	223-775-9	C; R34 [1] R43 N; R50/53
Polyoxypropylenediamine	9046-10-0	20-25		C; R34 [1]
3,3'-ethylenedioxybis(propylamine)	2997-01-5	20-25	221-067-4	Xn; R21 [1] C; R34 R43
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	5-10	220-666-8	Xn; R21/22 [1] C; R34 R43 R52/53
4-tert-butylphenol	98-54-4	5-10	202-679-0	Repr. Cat. 3; R62 [1] Xi; R41, R37/38 N; R51/53

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3. COMPOSITION/INFORMATION ON INGREDIENTS

See section 16 for the full text of the R-phrases declared above

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] PBT-substance

[4] vPvB-substance

Occupational exposure limits, if available, are listed in section 8.

4. FIRST AID MEASURES

First-aid measures

- Inhalation** : Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
- Ingestion** : Get medical attention immediately. Do not induce vomiting unless directed to do so by medical personnel. Chemical burns must be treated promptly by a physician. Maintain an open airway.
- Skin contact** : Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

See section 11 for more detailed information on health effects and symptoms.

5. FIRE-FIGHTING MEASURES

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6. ACCIDENTAL RELEASE MEASURES

- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13).
- Small spill** : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container.

7. HANDLING AND STORAGE

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Avoid release to the environment. Refer to special instructions/safety data sheet. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
- Packaging materials**
- Recommended** : Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
4-tert-butylphenol	TRGS900 AGW (Germany, 7/2009). Absorbed through skin. PEAK: 1 mg/m ³ 15 minute(s). PEAK: 0.16 ppm 15 minute(s). TWA: 0.5 mg/m ³ 8 hour(s). TWA: 0.08 ppm 8 hour(s).

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls

- Occupational exposure controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
- Respiratory protection** : No special measures required.
- Hand protection** :

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Reference number EN 374. Suitable for short time use or protection against splashes: Butyl rubber/nitrile rubber gloves. (0,4 mm), breakthrough time <30 min. Contaminated gloves should be removed. Suitable for permanent exposure: Viton gloves (0.4 mm), breakthrough time >30 min.
Eye protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Skin protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Use barrier skin cream.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

Form	: Liquid.
Colour	: Colourless to light yellow.
Odour	: Amine-like.

Important health, safety and environmental information

pH	: 12.4
Flash point	: Closed cup: >101 °C (>213.8 °F)
Density	: 0.99 g/cm ³ [20 °C (68 °F)]
Viscosity	: Dynamic: 50 mPa·s (50 cP)

10. STABILITY AND REACTIVITY

Stability	: The product is stable.
Conditions to avoid	: Avoid release to the environment. Refer to special instructions/safety data sheet.
Materials to avoid	: Reactive or incompatible with the following materials: acids
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

Potential acute health effects

Inhalation	: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. May cause irritation.
Ingestion	: May cause burns to mouth, throat and stomach.
Skin contact	: Corrosive to the skin. Causes burns. Harmful in contact with skin. May cause sensitisation by skin contact.
Eye contact	: Corrosive to eyes. Causes burns.
Chronic effects	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Fertility effects	: May impair fertility, based on animal data.

12. ECOLOGICAL INFORMATION

Environmental effects : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Methods of disposal : Completely emptied packagings can be given for recycling. Packaging containing remains of dangerous substances, as well as packagings disposed of remains can be unharmed eliminated in accordance with the regulations.

Packaging Completely emptied packagings may be given for recycling. Empty packaging may still contain hazardous residues. Empty packaging should be removed by a licensed waste contractor.

Sika has agreed disposal contracts for all packaging which is brought into circulation in Germany.

For further details see www.sika.de

14. TRANSPORT INFORMATION

International transport regulations

ADR

: UN2735
ADR Class : 8
Classification code : C7
Packing group : III
Proper shipping name : Polyamines, liquid, corrosives, n.o.s.
Contains : Pentaethylenehexamine
Label No. : 8

IMDG

: UN2735
IMDG Class : 8
Packing group : III
Proper shipping name : Polyamines, liquid, corrosives, n.o.s.
Contains : Pentaethylenehexamine
Emergency schedules (EmS) : F-A, S-B
Marine pollutant : P
Label no. : 8

IATA

: UN2735
IATA Class : 8
Packing group : III
Proper shipping name : Polyamines, liquid, corrosives, n.o.s.
Contains : Pentaethylenehexamine
Label no. : 8

15. REGULATORY INFORMATION

EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

- Hazard symbol or symbols** : C, N
Corrosive, Dangerous for the environment
- Contains** : 3,6,9,12-tetra-azatetradecamethylenediamine
Polyoxypropylenediamine
3,3'-ethylenedioxybis(propylamine)
3-aminomethyl-3,5,5-trimethylcyclohexylamine
4-tert-butylphenol
- Risk phrases** : R62- Possible risk of impaired fertility.
R21- Harmful in contact with skin.
R34- Causes burns.
R43- May cause sensitisation by skin contact.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Safety phrases** : S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- VOC content (EU)** : VOC (w/w): 0%

National regulations

- Hazard class for water** : 2 according Appendix No. (Gemäß VwVws vom 17. Mai 1999)
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16. OTHER INFORMATION

- Full text of classifications referred to in sections 2 and 3** : R62- Possible risk of impaired fertility.
R21- Harmful in contact with skin.
R21/22- Harmful in contact with skin and if swallowed.
R34- Causes burns.
R41- Risk of serious damage to eyes.
R37/38- Irritating to respiratory system and skin.
R43- May cause sensitisation by skin contact.
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Full text of classifications referred to in sections 2 and 3** : Repr. Cat. 3 - Toxic to reproduction category 3
C - Corrosive
Xn - Harmful
Xi - Irritant
N - Dangerous for the environment

History

- Date of printing** : 08.02.2011
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16. OTHER INFORMATION

☐ Indicates information that has changed from previously issued version.

Notice to reader

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.