



BE SURE. BUILD SURE.

Page 1/11

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.10.2021



Version number 4

Revision: 19.10.2021

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

- **Product identifier**
- **Trade name** Konudur 170 TR-NA - Komponente B
- **Relevant identified uses of the substance or mixture and uses advised against** *No further relevant information available.*
- **Application of the substance / the mixture** *Epoxy resin
Hardening agent/ Curing agent*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:** *MC-Bauchemie Müller GmbH & Co. KG
Am Kruppwald 1-8
D-46238 Bottrop
Tel.: +49(0)2041-101-0
Fax.: +49(0)2041-101-400
E-Mail: info@mc-bauchemie.de*
*MC-Bauchemie AG
Hagackerstr. 10
CH-8953 Dietikon
Tel.: +44-7400510
Fax : +44-7400533*
- **Informing department:** *msds@mc-bauchemie.de*
- **Emergency telephone number:** *Tel.: +49 / (0)700 24112112 (MCR)
Tel.: +48612864565*

2 Hazards identification

- **Classification of the substance or mixture**
 - Acute Tox. 4 *H302 Harmful if swallowed.*
 - Acute Tox. 4 *H312 Harmful in contact with skin.*
 - Skin Corr. 1B *H314 Causes severe skin burns and eye damage.*
 - Eye Dam. 1 *H318 Causes serious eye damage.*
 - Skin Sens. 1 *H317 May cause an allergic skin reaction.*
 - Aquatic Acute 3 *H402 Harmful to aquatic life.*
 - Aquatic Chronic 3 *H412 Harmful to aquatic life with long lasting effects.*
- **Label elements**
- **GHS label elements** *The product is classified and labelled according to the Globally Harmonised System (GHS).*
- **Hazard pictograms**
 -  
 - GHS05 GHS07
- **Signal word** *Danger*

(Contd. on page 2)

AE



BE SURE. BUILD SURE.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.10.2021

Version number 4

Revision: 19.10.2021

Trade name Konudur 170 TR-NA - Komponente B

(Contd. of page 1)

- **Hazard-determining components of labelling:** 3-aminomethyl-3,5,5-trimethylcyclohexylamine
Polyoxypropylentriamin
Amine polymer
Polyoxypropylenediamine
2,4,6-Tris-(1-Phenyl-Ethyl) carboic acid
- **Hazard statements** Harmful if swallowed.
Harmful in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Harmful to aquatic life with long lasting effects.
- **Precautionary statements** Do not breathe dusts or mists.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor.
Specific treatment (see on this label).
Take off contaminated clothing and wash it before reuse.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterisation: Mixtures**
- **Description:** Mixture consisting of the following components.

· **Dangerous components:**

7631-86-9	silicon dioxide, chemically prepared Acute Tox. 5, H313	25-50%
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥5-<25%
39423-51-3	Polyoxypropylentriamin Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Chronic 2, H411; Acute Tox. 4, H302; Acute Tox. 4, H312	≥5-<25%
9046-10-0	Polyoxypropylenediamine Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 5, H303; Acute Tox. 5, H313; Aquatic Chronic 3, H412	≥5-<25%
	Amine polymer Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1B, H317	≥3-<10%
38640-62-9	Diisopropyl-naphthalin-Isomere Aquatic Chronic 2, H411; Acute Tox. 5, H303; Acute Tox. 5, H313; Aquatic Acute 2, H401	≥2.5-<5%

(Contd. on page 3)



BE SURE. BUILD SURE.

Page 3/11

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.10.2021

Version number 4

Revision: 19.10.2021

Trade name Konudur 170 TR-NA - Komponente B

		(Contd. of page 2)
61788-44-1	2,4,6-Tris-(1-Phenyl-Ethyl) carbolic acid Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Acute 2, H401	≥0.25-<1%
13822-56-5	3-(trimethoxysilyl)propylamine Skin Corr. 1C, H314; Acute Tox. 4, H302; Skin Sens. 1A, H317; Flam. Liq. 4, H227	≥0.1-<1%

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

· **Description of first aid measures**

· **General information**

Instantly remove any clothing soiled by the product.
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 call for doctor for safety reasons.
In case of unconsciousness bring patient into stable side position for transport.

· **After skin contact**

Instantly wash with water and soap and rinse thoroughly.
Instantly rinse with water.

· **After eye contact**

Rinse opened eye for several minutes under running water.
Seek medical treatment.

· **After swallowing**

Rinse out mouth and then drink plenty of water.
Instantly call for doctor.
Drink copious amounts of water and provide fresh air. Instantly call for doctor.

· **Information for doctor**

· **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Firefighting measures

· **Extinguishing media**

· **Suitable extinguishing agents** Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture**

No further relevant information available.

· **Advice for firefighters**

· **Protective equipment:**

No special measures required.

AE

(Contd. on page 4)



BE SURE. BUILD SURE.

Page 4/11

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.10.2021

Version number 4

Revision: 19.10.2021

Trade name Konudur 170 TR-NA - Komponente B

(Contd. of page 3)

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **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 information on disposal.

7 Handling and storage

- **Handling**
- **Precautions for safe handling** Store in cool, dry place in tightly closed containers.
Open and handle container with care.
- **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 containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with critical 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.

(Contd. on page 5)

AE



BE SURE. BUILD SURE.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.10.2021

Version number 4

Revision: 19.10.2021

Trade name Konudur 170 TR-NA - Komponente B

(Contd. of page 4)

· DNELs

7631-86-9 silicon dioxide, chemically prepared

Inhalative DNEL 4 mg/m³ (ArL)

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Oral DNEL 0.526 mg/kg bw/Tag (ArL)

Inhalative DNEL 20.1 mg/m³ (ArL)

39423-51-3 Polyoxypropylentriamin

Inhalative DNEL 14 mg/m³ (ArL)

9046-10-0 Polyoxypropylenediamine

Oral DNEL 0.04 mg/kg bw/Tag (ArL)

Dermal DNEL 2.5 mg/kg bw/day (ArL)

· PNECs

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

PNEC 0.006 mg/l (Mew)

0.06 mg/l (Suw)

PNEC 0.578 mg/kg dwt (Sediment)

5.784 mg/kg dwt (Fresh water sediment)

39423-51-3 Polyoxypropylentriamin

PNEC 10 mg/l (Sewage Treatment Plant)

0.00044 mg/l (Mew)

0.0044 mg/l (Suw)

PNEC 0.002 mg/kg dwt (Bod)

0.002 mg/kg dwt (Sediment)

0.02 mg/kg dwt (Fresh water sediment)

9046-10-0 Polyoxypropylenediamine

PNEC 7.5 mg/l (Sewage Treatment Plant)

0.015 mg/l (Fresh water)

PNEC 0.0176 mg/kg dwt (Bod)

0.125 mg/kg dwt (Sediment)

0.132 mg/kg dwt (Fresh water sediment)

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

· Exposure controls

· Personal protective equipment

· General protective and hygienic measures

Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

· Protection of hands:

Protective gloves.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
After use of gloves apply skin-cleaning agents and skin cosmetics.

(Contd. on page 6)



BE SURE. BUILD SURE.

Page 6/11

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.10.2021

Version number 4

Revision: 19.10.2021

Trade name Konudur 170 TR-NA - Komponente B

· **Material of gloves**

(Contd. of page 5)
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
Tightly sealed safety glasses.

· **Body protection:**

Protective work clothing.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· Form:	Fluid
· Colour:	Whitish
· Smell:	Characteristic

· **Change in condition**

· Melting point/freezing point:	Not determined
· Initial boiling point and boiling range:	Not determined

· **Flash point:** > 150 °C

· **Self-inflammability:** Product is not selfigniting.

· **Explosive properties:** Product is not explosive.

· **Density at 20 °C** 1.25 g/cm³

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

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.

· **Chemical stability**

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

· **Possibility of hazardous reactions** No dangerous reactions known

· **Conditions to avoid** No further relevant information available.

· **Incompatible materials:** No further relevant information available.

(Contd. on page 7)

AE



BE SURE. BUILD SURE.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.10.2021

Version number 4

Revision: 19.10.2021

Trade name Konudur 170 TR-NA - Komponente B

(Contd. of page 6)

- **Hazardous decomposition products:** No dangerous decomposition products known

11 Toxicological information

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

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

7631-86-9 silicon dioxide, chemically prepared

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

Oral	LD50	1030 mg/kg (rat)
	NOAEL	250 mg/kg (rat)
Dermal	LD50	1840 mg/kg (rabbit)
		>2000 mg/kg (rat)

39423-51-3 Polyoxypropylentriamin

Oral	LD50	550 mg/kg (rat)
Dermal	LD50	>1000 mg/kg (rat)

9046-10-0 Polyoxypropylenediamine

Oral	LD50	2855 mg/kg (Rat)
Dermal	LD50	2980 mg/kg (Kan)

38640-62-9 Diisopropyl-naphthalin-Isomere

Oral	LD50	>4000 mg/kg (rat)
Dermal	LD50	>4000 mg/kg (rat)
Inhalative	LC50 OECD 403	>5.6 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation** Strong caustic effect.
- **Respiratory or skin sensitisation** Sensitization possible by skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
 Harmful
 Corrosive
 Irritant
 Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

AE

(Contd. on page 8)



BE SURE. BUILD SURE.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.10.2021

Version number 4

Revision: 19.10.2021

Trade name Konudur 170 TR-NA - Komponente B

(Contd. of page 7)

12 Ecological information

· **Toxicity**

· **Aquatic toxicity:**

7631-86-9 silicon dioxide, chemically prepared

IC50/72h	440 mg/l (<i>Selenastrum capricornutum</i>)
EC50/24h	>10000 mg/l (<i>Daphnia magna</i>)
LC50/96h	>5000 mg/l (<i>Danio rerio</i>)
	5000 mg/l (<i>Brachydanio rerio</i>)
EC50/48h	7600 mg/l (<i>Ceriodaphnia dubia</i>)
	120 mg/l (<i>Selenastrum capricornutum</i>)
NOEC	60 mg/l (<i>Selenastrum capricornutum</i>)

2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine

LC50/96h	110 mg/l (<i>Leucidus idus</i>)
EC50	1120 mg/l (<i>Pseudomonas putida</i>)
EC50/48h	23 mg/l (<i>Daphnia magna</i>)
NOEC	1.5 mg/l (<i>Desmodesmus subspicatus</i>)
	3 mg/l (<i>Daphnia magna</i>)
ErC50/72h	>50 mg/l (<i>Desmodesmus subspicatus</i>)

39423-51-3 Polyoxypropylentriamin

LC50/96h	>100 mg/l (<i>Oncorhynchus mykiss</i>)
EC50/48h	13 mg/l (<i>Daphnia magna</i>)
ErC50/72h	4.4 mg/l (algae)

38640-62-9 Diisopropyl-naphthalin-Isomere

EC50/72h	0.15 mg/l (algae)
LC50/48h	1.7 mg/l (<i>Daphnia magna</i>)
EC50/48h	0.16 mg/l (<i>Daphnia magna</i>)

· **Persistence and degradability** No further relevant information available.

· **Behaviour in environmental systems:**

· **Bioaccumulative potential** No further relevant information available.

· **Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:** Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even extremely small quantities leak into soil.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **Other adverse effects** No further relevant information available.

AE

(Contd. on page 9)



BE SURE. BUILD SURE.

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.10.2021

Version number 4

Revision: 19.10.2021

Trade name **Konudur 170 TR-NA - Komponente B**

(Contd. of page 8)

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation** *Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*
- **Waste disposal key number:** *55352*
 Bez.: aliphatische Amine
 Entsorgungshinweise:
 Sonderabfallverbrennung
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*

14 Transport information

· UN-Number · ADR, IMDG, IATA	<i>UN2735</i>
· UN proper shipping name · ADR, IMDG, IATA	<i>AMINES, LIQUID, CORROSIVE, N.O.S. (Polyoxypropylentriamin, Polyoxypropylenediamine)</i>
· Transport hazard class(es) · ADR · Class · Label	<i>8 (C7) Corrosive substances. 8</i>
· IMDG, IATA · Class · Label	<i>8 Corrosive substances. 8</i>
· Packing group · ADR, IMDG, IATA	<i>III</i>
· Environmental hazards: · Marine pollutant:	<i>no No</i>
· Special precautions for user · Kemler Number: · EMS Number: · Segregation groups · Stowage Category · Segregation Code	<i>Warning: Corrosive substances. 80 F-A, S-B Alkalis A SG35 Stow "separated from" SGG1-acids</i>
· Transport in bulk according to Annex II of Marpol and the IBC Code	<i>Not applicable.</i>

(Contd. on page 10)



BE SURE. BUILD SURE.

Page 10/11

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 25.10.2021

Version number 4

Revision: 19.10.2021

Trade name Konudur 170 TR-NA - Komponente B

(Contd. of page 9)

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **Transport category**

3

· **Tunnel restriction code**

E

· **IMDG**

· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**

UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S.
(POLYOXYPROPYLENTRIAMIN,
POLYOXYPROPYLENEDIAMINE), 8, III

15 Regulatory information

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I**

None of the ingredients is listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

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.

· **Department issuing data specification sheet:**

Environment protection department.

· **Contact:**

· **Abbreviations and acronyms:** RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

(Contd. on page 11)

AE



BE SURE. BUILD SURE.

Page 11/11

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 25.10.2021

Version number 4

Revision: 19.10.2021

Trade name Konudur 170 TR-NA - Komponente B

(Contd. of page 10)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 5: Acute toxicity – Category 5

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Skin Sens. 1A: Skin sensitisation – Category 1A

Skin Sens. 1B: Skin sensitisation – Category 1B

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

AE