



BE SURE. BUILD SURE.

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Safety Data Sheet according to P.U.(A) 310/2013

Printing date 21.04.2023

Version number 23



Revision: 21.04.2023

1 Identification of the hazardous chemical and of the supplier

- **Product identifier**
- **Trade name** Konudur 102 - Komponente A
- **Recommended use of the chemical and restrictions on use** No further relevant information available.
- **Application of the substance / the mixture** Epoxy sealing
- **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

2 Hazard identification

- **Classification of the substance or mixture**
 - Skin Irrit. 2 H315 Causes skin irritation.
 - Eye Irrit. 2 H319 Causes serious eye irritation.
 - Skin Sens. 1 H317 May cause allergic skin reaction.
 - Aquatic Chronic 2 H411 Toxic 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**

GHS07 GHS09
- **Signal word** Warning
- **Hazard-determining components of labelling:** epoxide derivates
Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)] dioxirane and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl} oxirane and 2,2'-[methylenebis(2,1-phenyleneoxymethylene)] dioxirane
Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1;2)

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- **Hazard statements** Causes skin irritation.
Causes serious eye irritation.
May cause allergic skin reaction.
- **Precautionary statements** Toxic to aquatic life with long lasting effects.
Avoid breathing dust/fume/ gas/mist/vapours/spray.
Avoid release to the environment.
Wear protective gloves / eye protection / face protection.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
Take off contaminated clothing and wash before reuse.
Wash contaminated clothing before reuse.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition and information of the ingredients of the hazardous chemical

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

· **Dangerous components:**

1675-54-3	epoxide derivates Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	50-70%
	Reaction mass of 2,2'-[methylenebis(4,1-phenyleneoxymethylene)]dioxirane and 2-({2-[4-(oxiran-2-ylmethoxy)benzyl]phenoxy)methyl}oxirane and 2,2'-[methylenebis(2,1-phenyleneoxymethylene)]dioxirane Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Skin Sens. 1, H317	≥10-<25%
933999-84-9	Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane (1;2) Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	≥10-<25%
13463-67-7	titanium dioxide Carc. 2, H351	<1%
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs Skin Irrit. 2, H315; Skin Sens. 1, H317	≥0.1-<0.5%

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

4 First-aid measures

- **Description of first aid measures**
- **After inhalation** Supply fresh air.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water.
Seek medical treatment.

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- **After swallowing** *Rinse out mouth and then drink plenty of water.
Seek medical treatment.*
- **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 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** *CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.*
- **Special hazards arising from the substance or mixture** *Can be released in case of fire
Carbon monoxide (CO)*
- **Advice for firefighters**
- **Protective equipment:** *Put on breathing apparatus.*

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** *Wear protective equipment. Keep unprotected persons away.*
- **Environmental precautions:** *Inform respective authorities in case product reaches water or sewage system.*
- **Methods and material for containment and cleaning up:** *Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*
- **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.*

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- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:** *Keep container tightly sealed.*
- **Storage class** *10*
- **Specific end use(s)** *10*
No further relevant information available.

8 Exposure controls and personal protection

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

· DNELs

68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

Oral	DNEL	1 mg/kg bw/Tag (ArL)
Dermal	DNEL	1.7 mg/kg bw/day (ArL)
Inhalative	DNEL	0.98 mg/m ³ (ArL)

· PNECs

68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

PNEC	0.00072 mg/l (Mew)
	0.0072 mg/l (Suw)
PNEC	80.12 mg/kg dwt (Bod)
	6.677 mg/kg dwt (Sediment)
	66.77 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*

· Material of gloves

*After use of gloves apply skin-cleaning agents and skin cosmetics.
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*

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- **Penetration time of glove material** (Contd. of page 4)
calculated in advance and has therefore to be checked prior to the application.
- **Eye protection:** *The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.*
- **Body protection:** *Safety glasses*
Protective work clothing.

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

- **Form:** *Fluid*
- **Colour:** *Red*
- **Smell:** *Characteristic*

- **pH-value:** *Not determined.*

· **Change in condition**

- **Melting point/freezing point** *Not determined*
- **Initial boiling point and boiling range** *>200 °C*

- **Flash point:** *>93 °C*

- **Auto-ignition temperature** *184 °C*

- **Auto-ignition temperature** *Product is not selfigniting.*

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

- **Steam pressure at 20 °C:** *<0.1 hPa*

- **Density at 20 °C** *1.14 g/cm³*

· **Solubility in / Miscibility with**

- **Water:** *Not miscible or difficult to mix*

· **Viscosity:**

- **dynamic at 20 °C:** *1000 mPas*
- **kinematic:** *Not determined.*

- **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.

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

1675-54-3 epoxide derivates

Dermal	LD50	23000 mg/kg (rabbit)
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13463-67-7 titanium dioxide

Oral	LD50	>10000 mg/kg (rat)
Dermal	LD50	>10000 mg/kg (rabbit)
Inhalative	LC50/4 h	>6.8 mg/l (rat)

68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

Oral	LD50	17100 mg/kg (rat)
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- **Primary irritant effect:**
- **Skin corrosion or irritation** Irritant for skin and mucous membranes.
- **Serious eye damage or eye irritation** No irritant effect.
- **Respiratory / skin sensitization** No sensitizing effect known.
- **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:
Irritant

12 Ecological information

- **Toxicity**

· **Aquatic toxicity:**

1675-54-3 epoxide derivates

IC50	>42.6 mg/l (Bak)
LC50/96h	2 mg/l (Oncorhynchus mykiss)
EC50/48h	1.8 mg/l (Daphnia magna)
ErC50/72h	11 mg/l (Selenastrum capricornutum)

68609-97-2 oxirane, mono[(C12-14-alkyloxy)methyl] derivs

EbC50/72h	843 mg/l (Pseudokirchneriella subcapitata)
LC50/96h	>5000 mg/l (Oncorhynchus mykiss) 1800 mg/l (Lepomis macrochirus)

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EC50	>100 mg/l (BEL)
NOEC	500 mg/l (Pseudokirchneriella subcapitata)
<ul style="list-style-type: none"> · 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. · Ecotoxicological effects: · Remark: Toxic for fish · Additional ecological information: · General notes: Toxic for aquatic organisms Also poisonous for fish and plankton in water bodies. Do not allow product to reach ground water, water bodies or sewage system. Danger to drinking water if even 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. 	

13 Disposal information

- **Waste treatment methods**
- **Recommendation** 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.

14 Transportation information

- **UN-Number**
- **ADR, IMDG, IATA** UN3082
- **UN proper shipping name**
- **ADR, IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxide derivatives)
- **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxide derivatives), MARINE POLLUTANT
- **Transport hazard class(es)**
- **ADR**
- **Class** 9 (M6) Miscellaneous dangerous substances and articles.
- **Label** 9

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· IMDG, IATA	
· Class	9 Miscellaneous dangerous substances and articles.
· Label	9
· Packing group	
· ADR, IMDG, IATA	III
· Environmental hazards:	
· Marine pollutant:	Yes
	Symbol (fish and tree)
· Special marking (ADR):	Symbol (fish and tree)
· Special marking (IATA):	Symbol (fish and tree)
· Special precautions for user	Warning: Miscellaneous dangerous substances and articles.
· Kemler Number:	90
· EMS Number:	F-A,S-F
· Stowage Category	A
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· 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	(-)
· 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 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (EPOXIDE DERIVATES), 9, III

15 Regulatory information

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

· **EHS reference list**

1675-54-3	epoxide derivatives
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs

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- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** *None of the ingredients is listed.*
- **Seveso category** *E2 Hazardous to the Aquatic Environment*
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** *200 t*
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** *500 t*
- **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)
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
Skin Irrit. 2: Skin corrosion or irritation – Category 2
Eye Irrit. 2: Serious eye damage or eye irritation – Category 2
Skin Sens. 1: Skin sensitization – Category 1
Carc. 2: Carcinogenicity – Category 2
Aquatic Chronic 2: Hazardous to the aquatic environment - chronic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - chronic hazard – Category 3
- *** Data compared to the previous version altered.**