



BE SURE. BUILD SURE.

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

Printing date 03.09.2019

Version number 3

Revision: 31.07.2019

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

1.1 Product identifier

Trade name **MC-DUR 1322 - Komponente B**

Article number: 4073

1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

Application of the substance / the mixture

Epoxy coating
Hardening agent/ Curing agent

1.3 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: Technische Abteilung
msds@mc-bauchemie.de

1.4 Emergency telephone number:

Tel.: +49 / (0)700 24112112 (MCR)
Tel.: +48612864565

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Corr. 1A 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.

2.2 Label elements

Labelling according to

Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05 GHS07

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- **Signal word** Danger
- **Hazard-determining components of labelling:**
 - Amine polymer
 - Polyoxypropylenediamine
 - 2-methylpentane-1,5-diamine
 - 3-aminomethyl-3,5,5-trimethylcyclohexylamine
- **Hazard statements**
 - H314 Causes severe skin burns and eye damage.
 - H317 May cause an allergic skin reaction.
- **Precautionary statements**
 - P260 Do not breathe dusts or mists.
 - P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P310 Immediately call a POISON CENTER/doctor.
 - P321 Specific treatment (see on this label).
 - P362+P364 Take off contaminated clothing and wash it before reuse.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

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

Dangerous components:

CAS: 100-51-6 EINECS: 202-859-9 Reg.nr.: 01-2119492630-38	Benzyl alcohol Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	≥25-≤50%
EC number: 949-140-2	Amine polymer Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1B, H317	25-50%
CAS: 9046-10-0 Reg.nr.: 01-2119557899-12	Polyoxypropylenediamine Skin Corr. 1B, H314; Aquatic Chronic 3, H412	≥5-<25%
CAS: 15520-10-2 EINECS: 239-556-6	2-methylpentane-1,5-diamine Skin Corr. 1A, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	≥5-<10%
CAS: 2855-13-2 EINECS: 220-666-8 Reg.nr.: 01-2119514687-32	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	≥3-<5%
CAS: 90-72-2 EINECS: 202-013-9 Reg.nr.: 2119560597-27	2,4,6-tris(dimethylaminomethyl)phenol Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	<2.5%

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· **Additional information**

For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **General information**

Instantly remove any clothing soiled by the product.
Seek medical treatment.

· **After inhalation**

Supply fresh air and call for doctor for safety reasons.

· **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.

· **After swallowing**

Drink copious amounts of water and provide fresh air. Instantly call for doctor.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**

· **Suitable extinguishing agents** CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· **For safety reasons unsuitable extinguishing agents**

Water with a full water jet.

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

No further relevant information available.

· **5.3 Advice for firefighters**

· **Protective equipment:**

Put on breathing apparatus.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **6.2 Environmental precautions:**

Prevent material from reaching sewage system, holes and cellars.

· **6.3 Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

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· **6.4 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.

SECTION 7: Handling and storage

· **7.1 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.

· **7.2 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.

· **7.3 Specific end use(s)**

No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical systems:**

No further data; see item 7.

· **8.1 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**

100-51-6 Benzyl alcohol

Oral DNEL 4 mg/kg bw/Tag (ArL)
20 mg/kg bw/Tag (Ark)

Dermal DNEL 8 mg/kg bw/day (ArL)
40 mg/kg bw/day (Ark)

Inhalative DNEL 22 mg/m³ (ArL)
110 mg/m³ (Ark)

9046-10-0 Polyoxypropylenediamine

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

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

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15520-10-2 2-methylpentane-1,5-diamine

Dermal	DNEL	1.5 mg/kg bw/day (ArL)
Inhalative	DNEL	0.25 mg/m ³ (ArL) 0.5 mg/m ³ (Ark)

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

Oral	DNEL	0.526 mg/kg bw/Tag (ArL)
Inhalative	DNEL	20.1 mg/m ³ (ArL)

90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

Inhalative	DNEL	0.31 mg/m ³ (ArL)
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· PNECs

100-51-6 Benzyl alcohol

PNEC	0.527 mg/l (Marine water sediment) 0.1 mg/l (Mew) 1 mg/l (Fresh water sediment)
PNEC	0.456 mg/kg dwt (Bod) 5.27 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)

15520-10-2 2-methylpentane-1,5-diamine

PNEC	0.042 mg/l (Mew) 0.42 mg/l (Suw)
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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)

90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

PNEC	0.2 mg/l (Sewage Treatment Plant) 0.0084 mg/l (Mew) 0.084 mg/l (Suw)
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· Additional information: The lists that were valid during the compilation were used as basis.

· 8.2 Exposure controls

· Personal protective equipment

· General protective and hygienic measures

Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.

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- **Protection of hands:** Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
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 calculated in advance and has therefore to be checked prior to the application.
- **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
Tightly sealed safety glasses.
- **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

- **Form:** Fluid
- **Colour:** Yellowish
- **Smell:** Amine-like

· Change in condition

- **Melting point/freezing point:** Not determined
- **Initial boiling point and boiling range:** 205 °C

· **Flash point:** > 100 °C

· **Ignition temperature:** 380 °C

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

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

· Critical values for explosion:

- **Lower:** 1.3 Vol %
- **Upper:** 13.0 Vol %

· **Steam pressure at 20 °C:** 0.1 hPa

· **Density at 20 °C** 1.02 g/cm³

· **Solubility in / Miscibility with Water:** Partly miscible

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- **Viscosity:**
- dynamic at 20 °C:* 195 mPas
- kinematic:* Not determined.
- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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

100-51-6 Benzyl alcohol

Oral	LD50	1,230 mg/kg (Ratte)
	NOAEL 2nd year study	200 mg/kg (Maus, mouse) 200 mg/kg (Ratte)
Dermal	LD50	2,000 mg/kg (Kaninchen)
Inhalative	LC50/4 h	>4,178 mg/l (Ratte)

9046-10-0 Polyoxypropylenediamine

Oral	LD50	2,855 mg/kg (Rat)
Dermal	LD50	2,980 mg/kg (Kan)

15520-10-2 2-methylpentane-1,5-diamine

Oral	LD50	1,170 mg/kg (Ratte)
Dermal	LD50	1,870 mg/kg (Kaninchen)
Inhalative	LC50/4 h	19.6 mg/l (Ratte)

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

Oral	LD50	1,030 mg/kg (Ratte)
	NOAEL	250 mg/kg (Ratte)
Dermal	LD50	1,840 mg/kg (Kaninchen)

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		>2,000 mg/kg (Ratte)
90-72-2 2,4,6-tris(dimethylaminomethyl)phenol		
Oral	LD50	2,169 mg/kg (Ratte)
	NOAEL	15 mg/kg (Ratte)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

100-51-6 Benzyl alcohol

IC50/72h	700 mg/l (Algen)
LC50/96h	460 mg/l (Pimephales promelas)
	10 mg/l (Lepomis macrochirus)

15520-10-2 2-methylpentane-1,5-diamine

EC50/72h	>100 mg/l (Algen)
EC50	1,825 mg/l (Fisch)
EC50/48h	19.8 mg/l (Daphnia magna)

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

LC50/96h	110 mg/l (Leucidus idus)
EC50	1,120 mg/l (Pseudomonas putida)
EC50/48h	23 mg/l (Daphnia magna)
NOEC	1.5 mg/l (Desmodesmus subspicatus)
	3 mg/l (Daphnia magna)
ErC50/72h	>50 mg/l (Desmodesmus subspicatus)

90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

EC50/72h	84 mg/l (Desmodesmus subspicatus)
LC50/96h	175 mg/l (Cyp)
NOEC	2 mg/l (BEL)
	6.25 mg/l (Desmodesmus subspicatus)

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- **12.2 Persistence and degradability** *No further relevant information available.*
- **12.3 Bioaccumulative potential** *No further relevant information available.*
- **12.4 Mobility in soil** *No further relevant information available.*
- **Additional ecological information:**
- **General notes:** *Do not allow product to reach ground water, water bodies or sewage system.
Danger to drinking water if even small quantities leak into soil.*
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **12.6 Other adverse effects** *No further relevant information available.*

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** *Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*

· **European waste catalogue**

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11	waste paint and varnish containing organic solvents or other dangerous substances

- **Uncleaned packagings:**
- **Recommendation:** *Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.*

SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** *UN2735*
- **14.2 UN proper shipping name**
- **ADR** *2735 AMINES, LIQUID, CORROSIVE, N.O.S. (2-methylpentane-1,5-diamine, Polyoxypropylenediamine)*
- **IMDG, IATA** *AMINES, LIQUID, CORROSIVE, N.O.S. (2-methylpentane-1,5-diamine, Polyoxypropylenediamine)*
- **14.3 Transport hazard class(es)**
- **ADR**
- **Class** *8 (C7) Corrosive substances.*

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· Label	8
· IMDG, IATA	
· Class	8 Corrosive substances.
· Label	8
· 14.4 Packing group	
· ADR, IMDG, IATA	II
· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Corrosive substances.
· Kemler Number:	80
· EMS Number:	F-A,S-B
· Segregation groups	Alkalis
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (2-METHYLPENTANE-1,5-DIAMINE, POLYOXYPROPYLENEDIAMINE), 8, II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

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· 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 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.

· Relevant phrases

*H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.*

· Department issuing data specification sheet:

Environment protection department.

· 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 européen sur le transport 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
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3*

· * Data compared to the previous version altered.