



BE SURE. BUILD SURE.

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

Printing date 01.09.2023

Version number 28 (replaces version 27)

Revision: 01.09.2023

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

1.1 Product identifier

Trade name

MC-CarboSolid 1209 TX - Komponente B

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

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:

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 GB CLP regulation.

Hazard pictograms



GHS05 GHS07

Signal word

Danger

Hazard-determining components of labelling:

Isophorone diamine
2-methylpentane-1,5-diamine

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- 4,4'-methylenebis(cyclohexan-1-amine)**
Polyoxypropylenediamine
Amine polymer
- **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 [or 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.
- **Additional information:** Contains epoxy constituents. May produce an allergic reaction.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.2 Mixtures

· **Description:** Mixture consisting of the following components.

· **Dangerous components:**

CAS: 9046-10-0 Reg.nr.: 01-2119557899-12	Polyoxypropylenediamine Skin Corr. 1B, H314; Aquatic Chronic 3, H412	≥10-<25%
EC number: 948-369-5	Amine polymer Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1B, H317	10-30%
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; STOT SE 3, H335	≥10-<20%
CAS: 2855-13-2 EINECS: 220-666-8 Reg.nr.: 01-2119514687-32	Isophorone diamine 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-<10%
CAS: 1761-71-3 EINECS: 217-168-8	4,4'-methylenebis(cyclohexan-1-amine) STOT RE 2, H373; Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Sens. 1B, H317	≥5-<10%
	Amine polymer Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1B, H317	≥3-<10%

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CAS: 100-51-6	Benzyl alcohol Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	(Contd. of page 2) <5%
· Additional information	For the wording of the listed hazard phrases refer to section 16.	

SECTION 4: First aid measures

- **4.1 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.
 - **After swallowing** Rinse out mouth and then drink plenty of water. Seek medical treatment.
- **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** Use fire fighting measures that suit the environment.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:** Collect mechanically.
- **6.4 Reference to other sections** See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.

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See Section 13 for information on disposal.

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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:** None.
- **Storage class** 8A
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **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

9046-10-0 Polyoxypropylenediamine

Oral	DNEL	0.04 mg/kg bw/Tag (ArL)
Dermal	DNEL	2.5 mg/kg bw/day (ArL)

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 Isophorone diamine

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

1761-71-3 4,4'-methylenebis(cyclohexan-1-amine)

Oral	DNEL	0.06 mg/kg bw/Tag (ArL)
Dermal	DNEL	0.1 mg/kg bw/day (ArL)
Inhalative	DNEL	1 mg/m ³ (ArL)

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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/m ³ (ArL) 110 mg/m ³ (Ark)

· PNECs

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 Isophorone diamine

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)

1761-71-3 4,4'-methylenebis(cyclohexan-1-amine)

PNEC	0.08 mg/l (Fresh water) 3.2 mg/l (Kla) 13.7 mg/l (Mew)
PNEC	27.2 mg/kg dwt (Bod) 13.7 mg/kg dwt (Sediment) 137 mg/kg dwt (Fresh water sediment)

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)

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

· 8.2 Exposure controls

· Appropriate engineering controls

No further data; see section 7.

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- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures** *Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.*
- **Hand protection** *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.*
- **Material of gloves** *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/face 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**
- **Colour:** *Grey*
- **Smell:** *Amine-like*
- **Melting point/freezing point:** *Not determined*
- **Boiling point or initial boiling point and boiling range** *247 °C (2855-13-2 3-aminomethyl-3,5,5-trimethylcyclohexylamine)*
- **Flash point:** *≥61 °C*
- **Auto-ignition temperature:** *380 °C*
- **pH at 20 °C** *12*
- **Viscosity:**
- **Kinematic viscosity** *Not determined.*
- **dynamic at 20 °C:** *40000 mPas*
- **Solubility**
- **Water:** *Partly miscible*
- **Steam pressure:** *Not determined.*
- **Density and/or relative density**
- **Density at 20 °C** *1.28 g/cm³*
- **9.2 Other information**
- **Appearance:**
- **Form:** *Pasty*

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· **Important information on protection of health and environment, and on safety.**

- **Self-inflammability:** Product is not selfigniting.
- **Explosive properties:** Product is not explosive.

· **Information with regard to physical hazard classes**

- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Void
- **Flammable solids** Void
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Void
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

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 hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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· LD/LC50 values that are relevant for classification:

9046-10-0 Polyoxypropylenediamine

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

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

Oral	LD50	1170 mg/kg (rat)
Dermal	LD50	1870 mg/kg (rabbit)
Inhalative	LC50/4 h	19.6 mg/l (rat)

2855-13-2 Isophorone diamine

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

1761-71-3 4,4'-methylenebis(cyclohexan-1-amine)

Oral	LD50	380 mg/kg (rat)
Dermal	LD50	2110 mg/kg (rat)

100-51-6 Benzyl alcohol

Oral	LD50	1230 mg/kg (rat)
	NOAEL 2nd year study	200 mg/kg (mouse) 200 mg/kg (rat)
		2000 mg/kg (rabbit)
Dermal	LD50	2000 mg/kg (rabbit)
Inhalative	LC50/4 h	>4178 mg/l (rat)

· **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.

· **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.

· 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

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

EC50/72h	>100 mg/l (algae)
EC50	1825 mg/l (fish)
EC50/48h	19.8 mg/l (Daphnia magna)

2855-13-2 Isophorone diamine

LC50/96h	110 mg/l (Leucidus idus)
EC50	1120 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)

1761-71-3 4,4'-methylenebis(cyclohexan-1-amine)

LC50/96h	>100 mg/l (Leucidus idus)
EC50/48h	6.84 mg/l (Daphnia magna)
NOEC	4 mg/l (Daphnia magna)
ErC50/72h	141.2 mg/l (Desmodesmus subspicatus)

100-51-6 Benzyl alcohol

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

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.

12.5 Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

12.6 Endocrine disrupting properties

The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

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.

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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.*

· **Uncleaned packagings:**

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

SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR, IMDG, IATA** UN2735

· **14.2 UN proper shipping name**

· **ADR, IMDG, IATA** AMINES, LIQUID, CORROSIVE, N.O.S. (2-methylpentane-1,5-diamine, Isophorone diamine)

· **14.3 Transport hazard class(es)**

· **ADR**

· **Class**

8 (C7) Corrosive substances.

· **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**

(SGG18) Alkalies

· **Stowage Category**

A

· **Segregation Code**

SG35 Stow "separated from" SGG1-acids

· **14.7 Maritime transport in bulk according to IMO instruments**

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

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· 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, ISOPHORONE DIAMINE), 8, II

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture** No further relevant information available.
- **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.
 - H335 May cause respiratory irritation.
 - H373 May cause damage to organs through prolonged or repeated exposure.
 - 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 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

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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 (UK REACH)
PNEC: Predicted No-Effect Concentration (UK 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
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

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