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## Safety data sheet according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.04.2025 Version number 64 (replaces version 63) Revision: 14.04.2025

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

· 1.1 Product identifier

• Trade name MC-BetoSolid SX - Komponente A

· Article number: 2132

· 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:

· 1.4 Emergency telephone

number:

msds@mc-bauchemie.de

Tel.: +49 / (0)700 24112112 (MCR) Tel.: +1 872 5888271 (MCR)

## **SECTION 2: Hazards identification**

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Repr. 1B H360F May damage fertility.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· 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



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· Signal word

Danger

· Hazard-determining

components of labelling:

4,4'-Methylenediphenyldiglycidyl ether

Oxirane, mono((C12-14-alkyloxy)methyl)derivatives

Reaction products of hexane-1,6-diol with 2-(chloromethyl)oxirane

(1:2)

· Hazard statements

H315 Causes skin irritation.

H319 Causes serious eve irritation.

H317 May cause an allergic skin reaction.

H360F May damage fertility.

H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

1412 Harrillul to aquatic life with long lasting effects.

P261 Avoid breathing dust/fume/gas/mist/vapours/

pray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye

protection/face protection/hearing protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for

several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/

attention.

P405 Store locked up.

· 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 compo	nents:	
CAS: 1675-54-3	4,4'-Methylenediphenyldiglycidyl ether	≥10-<25%
	Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	
CAS: 100-51-6	Benzyl alcohol	<2.5%
EINECS: 202-859-9	Acute Tox. 4, H302; Acute Tox. 4, H332; Eye Irrit. 2, H319	
CAS: 68609-97-2	Oxirane, mono((C12-14-alkyloxy)methyl)derivatives	≥1-<2.5%
EINECS: 271-846-8	Repr. 1B, H360F; Skin Irrit. 2, H315; Skin Sens. 1, H317	
CAS: 933999-84-9	Reaction products of hexane-1,6-diol with 2-(chloromethyl) oxirane (1:2)	≥0.1-<1%
	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	

• 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 Remove contaminated clothing immediately. Consult a doctor if

symptoms occur. Move affected person to fresh air.

· After inhalation Supply fresh air; seek medical advice if symptoms occur.

If unconscious, place in recovery position and seek medical advice.

· After skin contact In case of contact with skin, wash carefully with plenty of soap and

water. Consult a doctor in case of skin reactions.

· After eye contact Rinse opened eye for several minutes under running water.

Call a doctor immediately

· After swallowing Rinse mouth with water. Never give anything by mouth to an

unconscious person. DO NOT induce vomiting. If symptoms

persist, consult a doctor.

· 4.2 Most important symptoms and effects, both acute and

delayed Advice for the doctor: Elementary aid, decontamination,

symptomatic treatment.

### **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: Inform respective authorities in case product reaches water or

sewage system.

· 6.3 Methods and material for

containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders,

universal binders, sawdust).

Ensure adequate ventilation.

· 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.

## **SECTION 7: Handling and storage**

· 7.1 Precautions for safe handling

Open and handle containers with care.

Ventilation measures are required in rooms without sufficient air

exchange (e.g. closed rooms),

because the occupational exposure limit values (see chapter 8)

could be exceeded. This must be avoided.

Wear suitable personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Change contaminated or damaged gloves and contaminated clothing immediately and wash skin immediately. Mix slowly, partially covering the mixing container. Pour carefully and slowly when repotting. Observe the BGBau technical data sheet and practical guide for handling epoxy resins.

Information about protection

against explosions and fires: Ensure sufficient air exchange and/or extraction in the working

areas. Take precautionary measures to avoid electrostatic

discharges.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage

· Requirements to be met by

storerooms and containers: No special requirements.

· Further information about

storage conditions: None. Storage class 6.1C

### 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		
CAS: 100	-51-6 B	enzyl 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)

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CAS: 686	09-97-2	2 Oxirane, mono((C12-14-alkyloxy)methyl)derivatives	
Dermal	DNEL	0.75 mg/kg bw/day (ArL)	
Inhalative	DNEL	0.49 mg/m³ (ArL)	

#### · PNECs

#### CAS: 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)

### CAS: 68609-97-2 Oxirane, mono((C12-14-alkyloxy)methyl)derivatives

PNEC 0.00072 mg/l (Mew)

0.0072 mg/l (Freshwater)

PNEC 80.12 mg/kg dwt (Bod)

6.677 mg/kg dwt (Sediment)

66.77 mg/kg dwt (Fresh water sediment)

66.77 mg/kg dwt (Fresh water sedimen

· 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.

· Individual protection measures, such as personal protective equipment

· General protective and

**hygienic measures** Keep away from food, drink and animal feed.

Remove soiled, soaked clothing immediately.
Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin.

Breathing equipment: If workplace limit values cannot be complied with by ventilation

measures or if rooms cannot be technically ventilated, respiratory protection must be worn: Use combination filter A1-P2 (brown/white) in rooms that cannot be ventilated. If oxygen deficiency is expected, use self-contained breathing apparatus. Observe wearing time limits according to §9 (3) GefStoffV in conjunction

with BGR 190.

· Hand protection Selection of the glove material on consideration of the penetration

times, rates of diffusion and the degradation

· Material of gloves You can find help with choosing gloves on the website https://

www.bgbau.de/fileadmin/Gisbau/Projekte.pdf

For example, we recommend the Sol-vex 37-900 protective gloves from Ansell GmbH. The breakthrough time of the protective gloves can be found under point 8 "Penetration time of the glove material". The selection of a suitable glove depends not only on the material, but also on other quality features and varies from manufacturer to

manufacturer. As the product

is a preparation of several substances, the resistance of glove materials cannot be calculated in advance and must therefore be (Contd. on page 6)



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checked before use.

Nitrile rubber

Recommended material thickness:≥ 0.4 mm

· Penetration time of glove

material

The breakthrough times of the Sol-vex 37-900 protective gloves

are around 8 hours.

The following applies to all other gloves:

The exact breakthrough time must be obtained from the protective

glove manufacturer and adhered to.

Nitrile rubber

Material thickness: ≥ 0.40 mm Penetration time: ≥ 480 min

Butyl rubber:

Material thickness:  $\geq 0.5$  mm Penetration time:  $\geq 480$  min Tight-fitting safety goggles.

Safety goggles.

Protective clothing

Suitable protective clothing should be worn when working with epoxy resins. In addition to normal work clothing (long trousers, long-sleeved shirt or T-shirt), disposable overalls, aprons, overshoes, sleeve protectors etc. may be necessary depending on the activity. Uncovered areas of skin should be avoided as far as possible, even in hot weather. If the work involves kneeling, the

lower leg area should be protected by protective trousers.

## **SECTION 9: Physical and chemical properties**

· 9.1 Information on basic physical and chemical properties

· General Information

· Eye/face protection

· Body protection:

Colour: Whitish
 Smell: Characteristic
 Melting point/freezing point: Not determined

Boiling point or initial boiling point and

boiling range >200 °C (CAS: 25068-38-6 Propyl -2,2-diphenyl-

4,4'dipropyloxirane polymers and homologues

molecular weight < 700)

· Flash point: 151 °C

· pH Not applicable.

Not determined.

· Viscosity:

· Solubility

Kinematic viscositydynamic:Not determined.Not determined.

· Water: Not miscible or difficult to mix

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· Steam pressure at 20 °C: <0.1 hPa (CAS: 25068-38-6 Propyl -2,2-diphenyl-

Void

4,4'dipropyloxirane polymers and homologues

molecular weight < 700)

· Density and/or relative density

Density at 20 °C 2.28 g/cm³

· 9.2 Other information

· Appearance:

· Form: Fluid

· 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 substances and mixtures which emit

Substances and mixtures, which emit flammable gases in contact with water
 Oxidising liquids
 Oxidising solids
 Organic peroxides
 Corrosive to metals
 Desensitised explosives

### 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.

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· 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.

· LD/LC50	values that are relevant	t for classification:
CAS: 167	5-54-3 4,4'-Methylenedi	phenyldiglycidyl ether
Oral	LD50	11400 mg/kg (rat)
Dermal	LD50	23000 mg/kg (rabbit)
		>2000 mg/kg (rat)
CAS: 100	-51-6 Benzyl alcohol	
Oral	LD50	1230 mg/kg (rat)
	NOAEL 2nd year study	200 mg/kg (mouse)
		200 mg/kg (rat)
Dermal	LD50	2000 mg/kg (rabbit)
Inhalative	LC50/4 h	>4178 mg/l (rat)
CAS: 686	09-97-2 Oxirane, mono	((C12-14-alkyloxy)methyl)derivatives
01	100	474.00 mg/(sg. /upt)

Oral LD50 17100 mg/kg (rat)

Primary irritant effect:

Skin corrosion/irritation Causes skin irritation.
 Serious eye damage/irritation Causes serious eye irritation.

· Respiratory or skin

**sensitisation** May cause an allergic skin reaction.

• Germ cell mutagenicity
• Carcinogenicity

Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

Reproductive toxicity May damage fertility.

STOT-single exposure
STOT-repeated exposure
Aspiration hazard

Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
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.

## **SECTION 12: Ecological information**

· 12.1 Toxicity

· Aquatic toxicity:

CAS: 1675-54-3 4,4'-Methylenediphenyldiglycidyl ether

LC50/72h >11 mg/l (algae)

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IC50 >42.6 mg/l (Bak)

LC50/96h 2 mg/l (Oncorhynchus mykiss)

1.3 mg/l (fish)

EC50/48h 2.1 mg/l (daphnia)

1.8 mg/l (Daphnia magna)

ErC50/72h | 11 mg/l (Selenastrum capricornutum)

CAS: 100-51-6 Benzyl alcohol

IC50/72h | 700 mg/l (algae)

LC50/96h 460 mg/l (Pimephales promelas)

10 mg/l (Lepomis macrochirus)

CAS: 68609-97-2 Oxirane, mono((C12-14-alkyloxy)methyl)derivatives

EbC50/72h 843 mg/l (Pseudokirchneriella subcapitata)

LC50/96h >5000 mg/l (Oncorhynchus mykiss)

1800 mg/l (Lepomis macrochirus)

EC50 >100 mg/l (BEL)

NOEC 500 mg/l (Pseudokirchneriella subcapitata)

· 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

• 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

· Remark: Harmful to fish

· Additional ecological information:

· General notes: Harmful to aquatic organisms

Do not allow product to reach ground water, water bodies or

sewage system.

Danger to drinking water if even small quantities leak into soil.

### 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

17 00 00 CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)

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17 09 00	other construction and demolition wastes
17 09 03*	other construction and demolition wastes (including mixed wastes) containing hazardous substances
15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 01	paper and cardboard packaging
15 00 00	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01 00	packaging (including separately collected municipal packaging waste)
15 01 02	plastic packaging
HP4	Irritant - skin irritation and eye damage
HP10	Toxic for reproduction
HP13	Sensitising
HP14	Ecotoxic

· Uncleaned packagings:

• Recommendation: Disposal must be made according to official regulations.

14.1 UN number or ID number ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA Class	Void	
14.4 Packing group ADR, IMDG, IATA	Void	
14.5 Environmental hazards: Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Maritime transport in bulk accordi	ng to Not applicable.	
UN "Model Regulation":	Void	

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### **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 No further relevant information available.

Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

- · REGULATION (EU) 2019/1148
- · Annex I RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

· 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.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H332 Harmful if inhaled. H360F May damage fertility.

H411 Toxic to aquatic life with long lasting effects.H412 Harmful to aquatic life with long lasting effects.

· Department issuing data

**specification sheet:** Environment protection department.

Date of previous version: 17.10.2021

Version number of previous

version: 63

· 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)

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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

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 Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2

Skin Sens. 1: Skin sensitisation – Category 1 Repr. 1B: Reproductive toxicity – Category 1B

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

\* Data compared to the previous version altered.

- IE