



BE SURE. BUILD SURE.

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

Printing date 10.12.2024

Version number 34 (replaces version 33)

Revision: 12.10.2024

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

· **1.1 Product identifier**

· **Trade name** MC-DUR LF 680 - Komponente A

· **Article number:** 4143

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

· **Sector of Use** SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Product category** PC9a Coatings and paints, thinners, paint removers

· **Process category** PROC10 Roller application or brushing

· **Environmental release category** ERC8f Widespread use leading to inclusion into/onto article (outdoor)
ERC11a Widespread use of articles with low release (indoor)

· **Article category** AC13 Plastic articles

· **Application of the substance / the mixture** Polyurethane lacquer

· **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.: +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 Sens. 1 H317 May cause an allergic skin reaction.

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.

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Hazard pictograms



GHS07

Signal word

Warning

Hazard-determining components of labelling:

tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate
4-morpholinecarbaldehyde

Hazard statements

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

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

P273 Avoid release to the environment.

P280 Wear protective gloves.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P321 Specific treatment (see on this label).

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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:

Resin mixture.

Mixture consisting of the following components.

Dangerous components:

CAS: 136210-30-5 ELINCS: 429-270-1 Reg.nr.: 01-0000017556-64-xxxx	tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate Skin Sens. 1, H317; Aquatic Chronic 3, H412	80-100%
CAS: 4394-85-8 EINECS: 224-518-3 Reg.nr.: 01-2119987993-12	4-morpholinecarbaldehyde Skin Sens. 1, H317	≥0.1-<0.5%

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove soiled, soaked clothing immediately.

After inhalation

Remove person to fresh air, keep warm, allow to rest; if breathing is difficult, seek medical attention.

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.

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- **After eye contact** *Rinse the eyes with open eyelids for a sufficiently long time (at least 10 minutes) with water that is as lukewarm as possible. Consult an ophthalmologist.*
- **After swallowing** *Do NOT induce vomiting. Rinse mouth with water. Medical attention required.*
- **4.2 Most important symptoms and effects, both acute and delayed** *Advice for the doctor: Elementary aid, decontamination, symptomatic treatment.*
- **4.3 Indication of any immediate medical attention and special treatment needed** *Therapeutic measures: No 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:** *Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*
- **6.4 Reference to other sections** *No dangerous materials are released.*

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** *Ensure sufficient air exchange and/or extraction in the work areas. Air extraction is required for spray application. For solid products: Avoid dust formation and dust deposits. Air limit values mentioned in section 8 must be monitored. At workplaces where isocyanate aerosols and/or vapours can occur in higher concentrations, targeted air extraction must be used to prevent the occupational hygiene limit value from being exceeded. The air must be moved away from people.*

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*For products containing solvents: Explosion protection required.
The personal protective measures described in section 8 must be observed. The protective measures required when handling isocyanates must be observed. Avoid contact with skin and eyes and inhalation of vapours.
Keep away from food and beverages. Wash hands before breaks and at the end of work and apply skin protection ointment. Store work clothes separately. Remove soiled, soaked clothing immediately.*

Information about protection against explosions and fires:

*Keep ignition sources away - do not smoke.
Protect from heat.
Do not store near heat sources.*

7.2 Conditions for safe storage, including any incompatibilities

Keep container dry and tightly closed. Further information on the storage conditions that must be observed for quality assurance reasons can be found in our technical data sheet.

Storage

Requirements to be met by storerooms and containers:

Keep tightly closed in original packaging. Ventilate storage rooms well. Carefully close opened containers and store upright to prevent any leakage.

Storage temperature >5°C and <30°C

Information about storage in one common storage facility:

May be stored together with hazardous substances of other classes up to 200 kg.

Further information about storage conditions:

None.

Storage class

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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

CAS: 136210-30-5 tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate

Dermal DNEL 4 mg/kg bw/day (ArL)

Inhalative DNEL 28 mg/m³ (ArL)

112 mg/m³ (Ark)

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· PNECs

CAS: 136210-30-5 tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate

PNEC	31.1 mg/l (Kla)
	0.000013 mg/l (Mew)
	0.00013 mg/l (Freshwater)
PNEC	0.1 mg/kg dwt (Bod)
	0.02 mg/kg dwt (Marine water sediment)
	0.21 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.

· Individual protection measures, such as personal protective equipment

· General protective and hygienic measures

Do not smoke, eat or drink while working. Have eye wash equipment ready.

Do not inhale gases/vapours/aerosols. Avoid contact with eyes and skin.

Do not store food in the work area. Wash hands before breaks and at the end of work.

· Breathing equipment:

Respiratory protection required at insufficiently ventilated workplaces and when working with splashes. Fresh air masks or combination filters A2-P2 (EN529) are recommended for short-term work.

If applicable, further recommendations for respiratory protection can be found in the appendix.

In case of hypersensitivity of the respiratory tract (asthma, chronic bronchitis), handling of the product is not recommended.

· Hand protection

Suitable materials for protective gloves; EN 374:

Butyl rubber - IIR: thickness $\geq 0.5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluororubber - FKM: thickness $\geq 0.4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Multi-layer glove - PE/EVAL/PE ; Breakthrough time $\geq 480\text{min}$.

Recommendation: Dispose of contaminated gloves.

· 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.

· Penetration time of glove material

Butyl rubber - IIR: thickness $\geq 0.5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluoro rubber - FKM: thickness $\geq 0.4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Multi-layer glove - PE/EVAL/PE ; Breakthrough time $\geq 480\text{min}$.

· Eye/face protection

Wear safety goggles/face protection.

· Body protection:

Wear suitable protective clothing when working.

In case of hypersensitivity of the skin, handling of the product is not recommended.



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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

· Colour:	Cloudy
· Smell:	Weak, characteristic
· Melting point/freezing point:	Not determined
· Boiling point or initial boiling point and boiling range	185 °C (CAS: 136210-30-5 tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate)
· Flash point:	Not applicable
· Auto-ignition temperature:	350 °C (CAS: 152637-10-0 poly(oxy(methyl-1,2-ethanediyl)))
· pH	Not applicable. Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· dynamic at 20 °C:	300 mPas
· Solubility	
· Water:	Not miscible or difficult to mix
· Steam pressure at 20 °C:	2 hPa (CAS: 152637-10-0 poly(oxy(methyl-1,2-ethanediyl)))
· Vapour pressure at 50 °C:	8 hPa
· Density and/or relative density	
· Density at 20 °C	1.08 g/cm ³

9.2 Other information

· Appearance:	
· Form:	Liquid
· 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

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- **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.

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

CAS: 136210-30-5 tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate

Oral LD50 >2000 mg/kg (rat) (67/548/EWG, Annex V, B.1)

Dermal LD50 >2000 mg/kg (rat) (67/548/EWG, Annex V, B.3)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **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.

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· **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: 136210-30-5 tetraethyl-N,N'-(methylenedicyclohexane-4,1-diyl)bis-DL-aspartate

LC50/96h	66 mg/l (Danio rerio) (OECD 203)
EC50	3110 mg/l (BEL)
EC50/48h	88.6 mg/l (Daphnia magna)
NOEC	0.01 mg/l (Daphnia magna)
ErC50/72h	113 mg/l (Scenedesmus subspicatus)

· **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.

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 12	waste paint and varnish other than those mentioned in 08 01 11
HP13	Sensitising

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HP14 Ecotoxic

· **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, 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 according to IMO instruments**

Not applicable.

· **UN "Model Regulation":**

Void

SECTION 15: Regulatory information

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

No further relevant information available.

· **REGULATION (EC) No 1907/2006 ANNEX XVII**

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.

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· **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** H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
- **Date of previous version:** 19.10.2021
- **Version number of previous version:** 33
- **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
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
Skin Sens. 1: Skin sensitisation – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· * Data compared to the previous version altered.