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

Printing date 01.03.2024 Version number 25 (replaces version 24) Revision: 01.03.2024

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

· **1.1 Product identifier**

· **Trade name** **MC-Flex 2097 - Komponente A**

· **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** Polyurethane sealing

· **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)

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

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

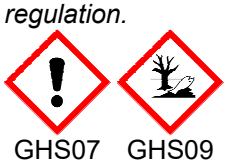
Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 2 H411 Toxic 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 GB CLP regulation.

· **Hazard pictograms**



GHS07 GHS09

· **Signal word** Warning

· **Hazard-determining components of labelling:** Reaction mass of Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester and decanedioic acid,(1,2,2,6,6-pentamethyl-4-piperidinyl) methyl ester

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· **Hazard statements** H317 May cause an allergic skin reaction.
H411 Toxic 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.

· **Additional information:** EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.

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SECTION 3: Composition/information on ingredients

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

· **Dangerous components:**

CAS: 13463-67-7 EINECS: 236-675-5	titanium dioxide Carc. 2, H351	≥1-<5%
CAS: 68479-98-1 EINECS: 270-877-4	diethylmethylbenzenediamine STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Acute Tox. 4, H312; Eye Irrit. 2, H319	≥2.5-<3%
EC number: 904-153-2	Reaktionsmasse aus 2-Ethylpropan-1,3-diol und 5-Ethyl-1,3-dioxan-5-methanol und Propylidyntrimethanol Repr. 2, H361fd; Eye Irrit. 2, H319	<1.5%
EC number: 915-687-0 Reg.nr.: 01-2119491304-40-XXXX	Reaction mass of Decanedioic acid, bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester and decanedioic acid,(1,2,2,6,6-pentamethyl-4-piperidinyl) methyl ester Repr. 2, H361; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Sens. 1A, H317	≥0.25-<0.5%

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SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information** Remove, decontaminate and dispose of soiled, soaked clothing and shoes immediately.
· **After inhalation** Remove person to fresh air, keep warm, allow to rest; if breathing is difficult, seek medical attention.

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· **After skin contact** In case of contact with skin, preferably wash with polyethylene glycol-based cleaner or clean with plenty of warm water and soap. Consult a doctor in case of skin reactions.

· **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** Information for the doctor: The product irritates the respiratory tract and is a potential trigger for skin and respiratory sensitisation. Treatment of acute irritation or bronchial constriction is primarily symptomatic. Depending on the extent of exposure and the symptoms, prolonged medical treatment may be necessary.

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

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SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
· **6.2 Environmental precautions:** Do not allow product to reach sewage system or water bodies.
· **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.

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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.

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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.
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.
Protect against electrostatic charges.

· **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:** Store only in the original container.
· **Further information about storage conditions:** Protect from heat and direct sunlight.
· **Storage class** 10
· **7.3 Specific end use(s)** No further relevant information available.

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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: 68479-98-1 diethylmethylbenzenediamine		
Dermal	DNEL	1 mg/kg bw/day (ArL)
Inhalative	DNEL	0.13 mg/m³ (ArL)

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· **PNECs**	
CAS: 68479-98-1 diethylmethylbenzenediamine	
PNEC aqua	0.05 µg/l (Mew)
	0.5 µg/l (Freshwater)
PNEC	17 mg/l (Kla)
PNEC	0.0029 mg/kg dwt (Marine water sediment)
	0.029 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**
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:** 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, nitrile rubber, chloroprene rubber (neoprene).
Note: suitable materials that provide sufficient protection for industrial cleaning with aprotic polar solvents (according to IUPAC definition): butyl rubber.
In case of prolonged or frequently repeated contact, a glove with a protection class of 5 or higher is recommended (breakthrough time greater than 240 minutes according to EN374). For short-term contact, a glove with a protection class of 3 or higher is recommended (breakthrough time greater than 60 minutes according to EN374).
The thickness of the material is not the only criterion for the level of protection of a glove against a chemical substance. The protective effect also depends to a large extent on the type of glove material. Depending on the type and material, the thickness must be more than 0.35 mm to ensure adequate protection in the event of prolonged and frequent contact. Exceptions to this rule are multi-layer gloves, which guarantee sufficient protection even with a thickness of less than 0.35 mm during prolonged wear. Other glove materials with a thickness of less than 0.35 mm only provide sufficient protection for short periods of wear.
For solvent-free products:
Example:

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	Polychloroprene - CR: thickness ≥0.5mm; breakthrough time ≥480min. Nitrile rubber - NBR: thickness ≥0.35mm; breakthrough time ≥480min. Butyl rubber - IIR: thickness ≥0.5mm; breakthrough time ≥480min. Fluoro rubber - FKM: thickness ≥0.4mm; breakthrough time ≥480min. Recommendation: Dispose of contaminated gloves.
· **Material of gloves**	Polychloroprene - CR Nitrile rubber - NBR Butyl rubber - IIR Fluoro rubber - FKM
· **Penetration time of glove material**	Polychloroprene - CR: thickness ≥0.5mm; breakthrough time ≥480min. Nitrile rubber - NBR: thickness ≥0.35mm; breakthrough time ≥480min. Butyl rubber - IIR: thickness ≥0.5mm; breakthrough time ≥480min. Fluoro rubber - FKM: Thickness ≥0.4mm; Breakthrough time ≥480min.
· **Eye/face protection**	Safety goggles with side protection in accordance with EN 166.
· **Body protection:**	Use chemical-resistant protective clothing. In case of hypersensitivity of the skin, handling 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:**	Grey
· **Smell:**	Characteristic
· **Melting point/freezing point:**	Not determined
· **Boiling point or initial boiling point and boiling range**	Not determined
· **Flash point:**	>200 °C
· **Auto-ignition temperature:**	370 °C
· **pH**	Not determined.
· **Viscosity:**	
· **Kinematic viscosity**	Not determined.
· **dynamic at 20 °C:**	2000 mPas
· **Solubility**	
· **Water:**	Not miscible or difficult to mix
· **Steam pressure:**	Not determined.
· **Density and/or relative density**	
· **Density at 20 °C**	1.04 g/cm³

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· **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**	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

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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

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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: 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)

CAS: 68479-98-1 diethylmethylbenzenediamine

Oral	LD50	738 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
		>2000 mg/kg (rat)

· **Skin corrosion/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.
· **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: 68479-98-1 diethylmethylbenzenediamine

EC50/24h	170 mg/l (Pseudomonas putida)
EC50/72h	104 mg/l (algae)
LC50/96h	>104 mg/l (fish)
LC50/48h	0.5 mg/l (Daphnien)
	200 mg/l (fish)
EC50/48h	5.8 mg/l (Daphnien)

· **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.

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· **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.

· **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** UN3082

· **14.2 UN proper shipping name**
· **ADR, IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (diethylmethylbenzenediamine)
· **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (diethylmethylbenzenediamine), MARINE POLLUTANT

· **14.3 Transport hazard class(es)**

· **ADR**
· **Class** 9 (M6) Miscellaneous dangerous substances and articles.
· **Label** 9

· **IMDG, IATA**
· **Class** 9 Miscellaneous dangerous substances and articles.
· **Label** 9

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· **14.4 Packing group**	
· **ADR, IMDG, IATA**	III
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	Yes Symbol (fish and tree)
· **Special marking (ADR):**	Symbol (fish and tree)
· **Special marking (IATA):**	Symbol (fish and tree)
· **14.6 Special precautions for user**	Warning: Miscellaneous dangerous substances and articles.
· **Kemler Number:**	90
· **EMS Number:**	F-A,S-F
· **Stowage Category**	A
· **14.7 Maritime transport in bulk according to IMO instruments**	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. (DIETHYLMETHYLBENZENEDIAMINE), 9, III

*
SECTION 15: Regulatory information

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

· **Poisons Act**

· **Regulated explosives precursors**

None of the ingredients is listed.

· **Regulated poisons**

None of the ingredients is listed.

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· **Reportable explosives precursors**
None of the ingredients is listed.

· **Reportable poisons**
None of the ingredients is listed.

· **Directive 2012/18/EU**
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t
· **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.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic 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
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

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PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Carc. 2: Carcinogenicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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