



BE SURE. BUILD SURE.

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

Printing date 21.04.2022

Version number 13

Revision: 21.04.2022

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

- **Product identifier**
- **Trade name** MC-Injekt 2300 top - Komponente B
- **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- **Application of the substance / the mixture** Polyurethane resin  
Injektion
- **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
- **Emergency telephone number:** Tel.: +49 / (0)700 24112112 (MCR)  
Tel.: +48612864565

### 2 Hazards identification

- **Classification of the substance or mixture**
  - Acute Tox. 4 H332 Harmful if inhaled.
  - Skin Irrit. 2 H315 Causes skin irritation.
  - Eye Irritation 2A H319 Causes serious eye irritation.
  - Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - Skin Sens. 1 H317 May cause an allergic skin reaction.
  - Carc. 2 H351 Suspected of causing cancer.
  - STOT SE 3 H335 May cause respiratory irritation.
  - STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.
- **Label elements**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS07 GHS08

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- **Signal word** *Danger*
- **Hazard-determining components of labelling:** *diphenylmethanediisocyanate, isomeres and homologues  
diphenylmethane-4,4'-di-isocyanate  
diphenylmethane-2,4'-diisocyanate  
diphenylmethane-2,2'-diisocyanate*
- **Hazard statements** *Harmful if inhaled.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
Suspected of causing cancer.  
May cause respiratory irritation.  
May cause damage to organs through prolonged or repeated exposure.*
- **Precautionary statements** *Do not breathe dust/fume/gas/mist/vapours/spray.  
Wear protective gloves/protective clothing/eye protection/face protection.  
[In case of inadequate ventilation] wear respiratory protection.  
IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  
Store in a well-ventilated place. Keep container tightly closed.*
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

### 3 Composition/information on ingredients

- **Chemical characterisation: Mixtures**
- **Description:** *Active substance with propellant.  
Mixture consisting of the following components.*

· **Dangerous components:**

9016-87-9	diphenylmethanediisocyanate, isomeres and homologues Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	25-50%
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101-68-8	diphenylmethane-4,4'-di-isocyanate Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	≥10-<25%
5873-54-1	diphenylmethane-2,4'-diisocyanate Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	≥10-<25%
2536-05-2	diphenylmethane-2,2'-diisocyanate Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	≥1-<1.5%

· **Additional information** For the wording of the listed hazard phrases refer to section 16.

#### 4 First aid measures

· **Description of first aid measures**

- **General information** Instantly remove any clothing soiled by the product.  
Take affected persons into the open air.  
Seek medical treatment.
- **After inhalation** Supply fresh air.  
Call a doctor immediately.
- **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** Call a doctor immediately.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

#### 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents** CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **Special hazards arising from the substance or mixture** Can be released in case of fire  
Carbon monoxide (CO)  
Nitrogen oxides (NO<sub>x</sub>)  
Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:  
Hydrogen cyanide (HCN)

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- **Advice for firefighters**
- **Protective equipment:** *Wear self-contained breathing apparatus.*

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** *Ensure adequate ventilation  
Use breathing protection against the effects of fumes/dust/aerosol.*
- **Environmental precautions:** *Prevent material from reaching sewage system, holes and cellars.*
- **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.*
- **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.*

### 7 Handling and storage

- **Handling**
- **Precautions for safe handling** *Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.*
- **Information about protection against explosions and fires:** *No special measures required.*
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** *Store only in the original container.*
- **Information about storage in one common storage facility:** *Store away from foodstuffs.*
- **Further information about storage conditions:** *Keep container tightly sealed.*
- **Specific end use(s)** *No further relevant information available.*

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** *No further data; see item 7.*

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· **Control parameters**

· **Components with critical values that require monitoring at the workplace:**

**9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

WEL (Great Britain)	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO
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**101-68-8 diphenylmethane-4,4'-di-isocyanate**

PEL (USA)	Ceiling limit: 0.2 mg/m <sup>3</sup> , 0.02 ppm
REL (USA)	Long-term value: 0.05 mg/m <sup>3</sup> , 0.005 ppm Ceiling limit: 0.2* mg/m <sup>3</sup> , 0.02* ppm *10-min
TLV (USA)	Long-term value: 0.005 ppm
WEL (Great Britain)	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO

**5873-54-1 diphenylmethane-2,4'-diisocyanate**

WEL (Great Britain)	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO
---------------------	---

**2536-05-2 diphenylmethane-2,2'-diisocyanate**

WEL (Great Britain)	Short-term value: 0.07 mg/m <sup>3</sup> Long-term value: 0.02 mg/m <sup>3</sup> Sen; as -NCO
---------------------	---

· **DNELs**

**9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

Inhalative DNEL	0.05 mg/m <sup>3</sup> (ArL)
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**101-68-8 diphenylmethane-4,4'-di-isocyanate**

Dermal DNEL	50 mg/kg bw/day (Ark)
Inhalative DNEL	0.05 mg/m <sup>3</sup> (ArL)

**5873-54-1 diphenylmethane-2,4'-diisocyanate**

Inhalative DNEL	0.05 mg/m <sup>3</sup> (ArL)
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· **PNECs**

**9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

PNEC	1 mg/l (Sewage Treatment Plant) 0.1 mg/l (Mew) 1 mg/l (Suw)
PNEC	1 mg/kg dwt (Bod)

**101-68-8 diphenylmethane-4,4'-di-isocyanate**

PNEC	1 mg/l (Sewage Treatment Plant) 0.1 mg/l (Mew) 1 mg/l (Suw)
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PNEC	1 mg/kg dwt (Bod)
<b>5873-54-1 diphenylmethane-2,4'-diisocyanate</b>	
PNEC	1 mg/l (Sewage Treatment Plant)
	0.1 mg/l (Mew)
	1 mg/l (Suw)
PNEC	1 mg/kg dwt (Bod)
<b>Ingredients with biological limit values:</b>	
<b>101-68-8 diphenylmethane-4,4'-di-isocyanate</b>	
BMGV (Great Britain)	1 µmol creatinine/mol Medium: urine Sampling time: At the end of the period od exposure Parameter: isocyanate-derived diamine
<b>5873-54-1 diphenylmethane-2,4'-diisocyanate</b>	
BMGV (Great Britain)	1 µmol creatinine/mol Medium: urine Sampling time: At the end of the period od exposure Parameter: isocyanate-derived diamine
<b>2536-05-2 diphenylmethane-2,2'-diisocyanate</b>	
BMGV (Great Britain)	1 µmol creatinine/mol Medium: urine Sampling time: At the end of the period od exposure Parameter: isocyanate-derived diamine

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

· **Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.  
Instantly remove any soiled and impregnated garments.  
Wash hands during breaks and at the end of the work.  
Avoid contact with the eyes and skin.  
Do not eat, drink or smoke while working.

· **Breathing equipment:**

Respiratory protection is required at inadequately ventilated workplaces and during spray processing. Fresh air masks or combination filters A2-P2 are recommended for short-term work.

· **Protection of hands:**

Conditionally suitable materials for protective gloves; EN 374-3: Nitrile rubber - NBR: Thickness ≥ 0.35mm.  
Only suitable for splash protection. Only suitable for short-term exposure. In case of contamination, the protective gloves must be changed immediately.

· **Material of gloves**

Nitrile rubber, NBR

· **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.

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· **Body protection:** Protective work clothing.

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### 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Fluid  
**Colour:** Dark brown  
**Smell:** Characteristic

· **Change in condition**

**Melting point/freezing point:** Not determined  
**Initial boiling point and boiling range:** 351 °C

· **Flash point:** > 110 °C

· **Ignition temperature:** 400 °C

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

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

· **Density at 20 °C** 1.09 g/cm<sup>3</sup>

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

Hydrolized

· **Viscosity:**

**kinematic at 20 °C:** 14 s (DIN 53211/4 s beach)

· **Other information** No further relevant information available.

### 10 Stability and reactivity

· **Reactivity** No further relevant information available.

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **Possibility of hazardous reactions**

Reacts with amines

· **Conditions to avoid**

No further relevant information available.

· **Incompatible materials:**

No further relevant information available.

· **Hazardous decomposition products:**

No dangerous decomposition products known

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**11 Toxicological information**

- Information on toxicological effects
- Acute toxicity

· LD/LC50 values that are relevant for classification:

**9016-87-9 diphenylmethanediisocyanate, isomeres and homologues**

Oral	LD50	>10000 mg/kg (Rat)
Dermal	LD50	>5000 mg/kg (Rab)
Inhalative	LC50/4 h	~450 mg/l (Rat)

**101-68-8 diphenylmethane-4,4'-di-isocyanante**

Oral	LD50	>10000 mg/kg (rat)
Dermal	LD50	>9400 mg/kg (rabbit)

· Primary irritant effect:

- Skin corrosion/irritation                      Irritant for skin and mucous membranes.
- Serious eye damage/irritation                Irritant effect.
- Respiratory or skin sensitisation    Sensitization possible by inhalation.  
Sensitization possible by skin contact.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant

- CMR effects (carcinogeny, mutagenicity and toxicity for reproduction)    Carc. 2

**12 Ecological information**

· Toxicity

· Aquatic toxicity:

**101-68-8 diphenylmethane-4,4'-di-isocyanante**

EC50/24h	>1000 mg/l (Daphnia magna)
LC50/96h	>1000 mg/l (Brachydanio rerio)
NOEC	>1000 mg/l (Eisenia foetida)
	>10 mg/l (Daphnia magna)

- Persistence and degradability                No further relevant information available.
- Behaviour in environmental systems:
- Bioaccumulative potential                      No further relevant information available.
- Mobility in soil                                      No further relevant information available.
- Additional ecological information:
- General notes:                                      Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

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- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **Other adverse effects** *No further relevant information available.*

### 13 Disposal considerations

- **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.*

### 14 Transport information

- |  |                        |
|--|------------------------|
| · <b>UN-Number</b><br>· <b>ADR, ADN, IMDG, IATA</b>                                    | Void                   |
| · <b>UN proper shipping name</b><br>· <b>ADR, ADN, IMDG, IATA</b>                      | Void                   |
| · <b>Transport hazard class(es)</b><br>· <b>ADR, ADN, IMDG, IATA</b><br>· <b>Class</b> | Void                   |
| · <b>Packing group</b><br>· <b>ADR, IMDG, IATA</b>                                     | Void                   |
| · <b>Environmental hazards:</b><br>· <b>Marine pollutant:</b>                          | No                     |
| · <b>Special precautions for user</b>  | <i>Not applicable.</i> |
| · <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>            | <i>Not applicable.</i> |
| · <b>UN "Model Regulation":</b>  | Void                   |

### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** *None of the ingredients is listed.*

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· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 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.

· **Department issuing data specification sheet:**

Environment protection department.

· **Contact:**

· **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

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

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

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