



BE SURE. BUILD SURE.

Page 1/11

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

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

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

#### · 1.1 Product identifier

· Trade name **MC-Injekt PowerSeal F**

· 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)

· Application of the substance

/ the mixture Polyurethane resin  
Injektion

· 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 Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 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.

· 2.2 Label elements

· Labelling according to

Regulation (EC) No 1272/2008 The product is classified and labelled according to the GB CLP regulation.

(Contd. on page 2)

GB



BE SURE. BUILD SURE.

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

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

Trade name MC-Injekt PowerSeal F

(Contd. of page 1)

· **Hazard pictograms**



GHS07 GHS08

· **Signal word**

Danger

· **Hazard-determining components of labelling:**

Reaction mixture of 4,4'- methylene diphenyl diisocyanate and o-(piscyanatobenzyl) phenyl isocyanate diphenylmethanediisocyanate, isomeres and homologues Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer

· **Hazard statements**

H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H317 May cause an allergic skin reaction.  
H351 Suspected of causing cancer.  
H335 May cause respiratory irritation.  
H373 May cause damage to organs through prolonged or repeated exposure.

· **Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P284 [In case of inadequate ventilation] wear respiratory 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.  
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

· **Additional information:**

Contains isocyanates. May produce an allergic reaction. As from 24 August 2023 adequate training is required before industrial or professional use.

· **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.

(Contd. on page 3)



BE SURE. BUILD SURE.

Page 3/11

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

Trade name MC-Injekt PowerSeal F

(Contd. of page 2)

**· Dangerous components:**

|   |  |          |
|---|--|----------|
| EC number: 905-806-4<br>Reg.nr.: 01-2119457015-45-0001              | Reaction mixture of 4,4'- methylene diphenyl diisocyanate and o-(pisocyanatobenzyl) phenyl isocyanate<br><br>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. 1B, H317; STOT SE 3, H335  | ≥10-<20% |
| CAS: 9016-87-9  | diphenylmethanediisocyanate, isomeres and homologues<br><br>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, EUH204<br><br>Specific concentration limits:<br>Eye Irrit. 2; H319: C ≥ 5%<br>Skin Irrit. 2; H315: C ≥ 5%<br>Resp. Sens. 1; H334: C ≥ 0.1%<br>STOT SE 3; H335: C ≥ 5% | ≥5-<10%  |
| CAS: 6425-39-4<br>EINECS: 229-194-7                                 | 2,2'-dimorpholinyl-diethyl ether<br><br>Eye Irrit. 2, H319   | <3%      |
| CAS: 25686-28-6<br>NLP: 500-040-3<br>Reg.nr.: 01-2119457013-49-0001 | Benzene, 1,1'-methylenebis[4-isocyanato-, homopolymer<br><br>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-<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****· General information**Take affected persons into the open air.  
Seek medical treatment.**· After inhalation**Supply fresh air.  
Seek immediate medical advice.  
Supply fresh air and call for doctor for safety reasons.  
In case of unconsciousness bring patient into stable side position for transport.**· After skin contact**

Instantly wash with water and soap and rinse thoroughly.

**· After eye contact**Seek medical treatment.  
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.**· After swallowing**

Call a doctor immediately.

**· 4.2 Most important symptoms and effects, both acute and delayed**

No further relevant information available.

(Contd. on page 4)

GB



BE SURE. BUILD SURE.

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

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

Trade name MC-Injekt PowerSeal F

(Contd. of page 3)

- **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**
  - 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)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information:** Cool endangered containers with water spray jet. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter drains.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation  
Use breathing protection against the effects of fumes/dust/aerosol.
- **6.2 Environmental precautions:** Dilute with much water.
- **6.3 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.
- **6.4 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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.

(Contd. on page 5)



BE SURE. BUILD SURE.

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

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

Trade name MC-Injekt PowerSeal F

(Contd. of page 4)

Prevent formation of aerosols.

- **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:** 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.
- **Storage class** 10
- **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:

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

|     |   |
|-----|---|
| WEL | Short-term value: 0.07 mg/m <sup>3</sup><br>Long-term value: 0.02 mg/m <sup>3</sup><br>Sen; as -NCO |
|-----|---|

#### DNELs

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

|                 |                              |
|-----------------|------------------------------|
| Inhalative DNEL | 0.05 mg/m <sup>3</sup> (ArL) |
|-----------------|------------------------------|

#### PNECs

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

|      |   |
|------|---|
| PNEC | 1 mg/l (Sewage Treatment Plant)<br>0.1 mg/l (Mew)<br>1 mg/l (Suw) |
| PNEC | 1 mg/kg dwt (Bod)   |

· **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 eat, drink or smoke while working.  
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.

#### 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.

(Contd. on page 6)



BE SURE. BUILD SURE.

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

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

Trade name MC-Injekt PowerSeal F

(Contd. of page 5)

- **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** *Nitrile rubber, NBR  
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 trough 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:** *Impervious protective clothing  
Protective work clothing.*

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Physical state** *Fluid*
- **Colour:** *Whitish*
- **Smell:** *Characteristic*
- **Odour threshold:** *Not determined.*
- **Melting point/freezing point:** *Not determined*
- **Boiling point or initial boiling point and boiling range** *>230 °C (26447-40-5 methylenediphenyl diisocyanate)*
- **Flammability** *Not applicable.*
- **Lower and upper explosion limit**
- **Lower:** *Not determined.*
- **Upper:** *Not determined.*
- **Flash point:** *>200 °C*
- **Auto-ignition temperature:** *330 °C (166412-78-8 1,2-Cyclohexandicarbonsäurediisononylester)*
- **Decomposition temperature:** *Not determined.*
- **pH** *Mixture reacts violently with water.  
Not determined.*
- **Viscosity:**
- **Kinematic viscosity** *Not determined.*
- **dynamic at 20 °C:** *800 mPas*
- **Solubility**
- **Water:** *Readily soluble*

(Contd. on page 7)



BE SURE. BUILD SURE.

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

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

Trade name MC-Injekt PowerSeal F

(Contd. of page 6)

- **Partition coefficient n-octanol/water (log value)** Not determined.
- **Steam pressure at 20 °C:** 0 hPa
- **Density and/or relative density**
- **Density at 20 °C** 1.03 g/cm<sup>3</sup>
- **Relative density** Not determined.
- **Vapour density** Not determined.

- **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.
- **Change in condition**
- **Evaporation rate** Not determined.

- **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** stable
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Reacts with amines
- **10.4 Conditions to avoid** No further relevant information available.

(Contd. on page 8)



BE SURE. BUILD SURE.

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

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

Trade name MC-Injekt PowerSeal F

(Contd. of page 7)

- **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:**

##### 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)    |

##### 6425-39-4 2,2'-dimorpholinyl-diethyl ether

|        |      |                     |
|--------|------|---------------------|
| Oral   | LD50 | 2025 mg/kg (rat)    |
| Dermal | LD50 | 3038 mg/kg (rabbit) |

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **Respiratory or skin sensitisation** May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.
- **Carcinogenicity** Suspected of causing cancer.
- **STOT-single exposure** May cause respiratory irritation.
- **STOT-repeated exposure** May cause damage to organs through prolonged or repeated exposure.

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

#### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **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.

(Contd. on page 9)





BE SURE. BUILD SURE.

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

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

Trade name MC-Injekt PowerSeal F

(Contd. of page 8)

· **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 undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

### 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.

· **Recommended cleaning agent:**

Water, if necessary with cleaning agent.

### SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR, IMDG, IATA**

Void

· **14.2 UN proper shipping name**

· **ADR, 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

GB

(Contd. on page 10)



BE SURE. BUILD SURE.

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

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

Trade name MC-Injekt PowerSeal F

(Contd. of page 9)

#### SECTION 15: Regulatory information

- **15.1 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.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

#### SECTION 16: Other information

- **Relevant phrases**
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.
  - H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  - H335 May cause respiratory irritation.
  - H351 Suspected of causing cancer.
  - H373 May cause damage to organs through prolonged or repeated exposure.
  - EUH204 Contains isocyanates. May produce an allergic reaction.
- **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
  - 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
  - Resp. Sens. 1: Respiratory sensitisation – Category 1
  - Skin Sens. 1: Skin sensitisation – Category 1
  - Skin Sens. 1B: Skin sensitisation – Category 1B
  - Carc. 2: Carcinogenicity – Category 2
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

(Contd. on page 11)



BE SURE. BUILD SURE.

Page 11/11

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

Printing date 08.07.2023

Version number 17 (replaces version 16)

Revision: 08.07.2023

**Trade name MC-Injekt PowerSeal F**

(Contd. of page 10)

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

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

GB