

# Deckblatt zum Sicherheitsdatenblatt

## Fiche de données de sécurité: page de garde

### Pagina di copertina della scheda di dati di sicurezza

überarbeitet am / élaborée le / elaborata il **03 03 2025**

ersetzt Version vom / remplace la version du / sostituisce la versione del **na**

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#### Produktidentifikation / Identification du produit / Identificatore del prodotto:

Handelsname / Nom commercial / Nome del prodotto **PLUSERIES 25 Second Prepolymer**

**PLUSERIES 60 Second Prepolymer**

**PLUSERIES Composite Prepolymer**

Verwendungszweck **Klebstoff**

Usage **Colle**

Usi pertinenti identificati **Colle**

#### Lieferant, der das Sicherheitsdatenblatt übermittelt:

Fournisseur qui transmet la fiche de données de sécurité:

Informazioni sul fornitore della scheda di dati di sicurezza:

FREY Orthopädie-Bedarf AG  
Panoramaweg 35  
CH-5504 Othmarsingen  
Tel: 062 887 45 00

**Nationale Notfallnummer:** **145** (24h erreichbar, Tox Info Suisse, Zürich; für Anrufe aus der Schweiz, Auskünfte auf Deutsch, Französisch und Italienisch)

**Numéro d'urgence national:** **145** (joignable 24 h sur 24, Tox Info Suisse, Zurich ; pour les appels effectués depuis la Suisse, informations en français, allemand et italien)

**Numero telefonico di emergenza:** **145** (Tox Info Suisse, raggiungibile 24 ore su 24)

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Deckblatt erstellt / Page de garde élaborée le / Pagina di copertina realizzata il: **03 03 2025**

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product Identifier

**SDS #** FAB-004-EU  
**Product Name** PLUSERIES 25 Second Prepolymer  
 PLUSERIES 60 Second Prepolymer  
 PLUSERIES Composite Prepolymer

Contains 4,4- methylenediphenyl diisocyanate (MDI)

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** For industrial use Adhesive

### 1.3. Details of the Supplier of the Safety Data Sheet

#### Supplier

Fabtech Systems LLC  
 PO Box 2248  
 Everett, WA 98213

#### For further information, please contact

**Contact Point** Fabtech Systems: 1-800-322-8324  
**Email Address** [info@fabtechsystems.com](mailto:info@fabtechsystems.com)

### 1.4. Emergency telephone number

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)  
 1-800-535-5053 (North America)

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

*Regulation (EC) No 1272/2008*

<b>Acute toxicity - Inhalation (Dusts/Mists)</b>	Category 4 - (H332)
<b>Skin corrosion/irritation</b>	Category 2 - (H315)
<b>Serious eye damage/eye irritation</b>	Category 2 - (H319)
<b>Respiratory sensitisation</b>	Category 1 - (H334)
<b>Skin sensitisation</b>	Category 1 - (H317)
<b>Carcinogenicity</b>	Category 2 - (H351)
<b>Specific target organ toxicity — single exposure</b>	Category 3 - (H335)
<b>Specific target organ toxicity — repeated exposure</b>	Category 2 - (H373)

### 2.2. Label Elements

**Product Identifier**  
 Contains 4,4- methylenediphenyl diisocyanate (MDI)



**Signal Word**  
 Danger

**Hazard statements**

- 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

**Precautionary Statements - EU (§28, 1272/2008)**

- P201 - Obtain special instructions before use
- P202 - Do not handle until all safety precautions have been read and understood
- P260 - Do not breathe dust/fume/gas/mist/vapours/spray
- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P271 - Use only outdoors or in a well-ventilated area
- P272 - Contaminated work clothing should not be allowed out of the workplace
- P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
- P362 - Take off contaminated clothing and wash before reuse
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P337 + P313 - If eye irritation persists: Get medical advice/attention
- P308 + P313 - IF exposed or concerned: Get medical advice/attention
- P405 - Store locked up
- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
- P501 - Dispose of contents/ container to an approved waste disposal plant

**2.3. Other Hazards**

No information available

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2 MIXTURES**

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
4,4- methylenediphenyl diisocyanate (MDI)	Present	101-68-8	35.51	Acute Tox. 4 (H332) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Carc. 2 (H351) STOT SE 3 (H335) STOT RE 2 (H373)	Not determined

Propylene carbonate	Present	108-32-7	1.49	Eye Irrit. 2 (H319)	Not determined
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**Full text of H- and EUH-phrases: see section 16**

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## Section 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

<b>Eye Contact</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Ingestion</b>	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

### 4.2. Most Important Symptoms and Effects, Both Acute and Delayed

<b>Symptoms</b>	Symptoms/effects after inhalation: Harmful if inhaled. May cause irritation to the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Symptoms/effects after skin contact: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause sensitization by skin contact. Symptoms/effects after eye contact: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Symptoms/effects after ingestion: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
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### 4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

<b>Notes to Physician</b>	Treat symptomatically.
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## Section 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media**

Water spray, dry chemical, foam, carbon dioxide.

**Unsuitable Extinguishing Media**

Do not use water jet.

### 5.2. Special Hazards Arising from the Substance or Mixture

Products of combustion may include and are not limited to: oxides of carbon. Hydrogen cyanide. Isocyanates. Nitrogen oxides. Toxic fumes. Aldehydes. Ketones. Halogenated compounds. Bromine. Hydrocarbons.

### 5.3. Advice for Firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

#### **Personal Precautions**

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

#### **For Emergency Responders**

Use personal protection recommended in Section 8.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. See Section 12 for additional Ecological Information.

### 6.3. Methods and Material for Containment and Cleaning Up

#### **Methods for Containment**

Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

#### **Methods for Clean-Up**

Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

### 6.4. Reference to Other Sections

See Section 13: DISPOSAL CONSIDERATIONS.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

#### **Advice on Safe Handling**

Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.

#### **General Hygiene Considerations**

Contaminated work clothing should not be allowed out of the workplace. Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

### 7.2. Conditions for Safe Storage, Including any Incompatibilities

#### **Storage Conditions**

Keep out of the reach of children. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

### 7.3. Specific End Use(s)

#### **Specific Use(s)**

For industrial use. Adhesive.

#### **Risk Management Methods (RMM)**

The information required is contained in this Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

#### Exposure Limits

Chemical name	European Union	United Kingdom	France	Spain	Germany
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	-	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.01 ppm TWA: 0.1 mg/m <sup>3</sup> STEL: 0.02 ppm STEL: 0.2 mg/m <sup>3</sup>	TWA: 0.005 ppm TWA: 0.052 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup> H*
Propylene carbonate 108-32-7	-	-	-	-	TWA: 2 ppm TWA: 8.5 mg/m <sup>3</sup>
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	-	TWA: 0.005 ppm	-	STEL: 0.035 mg/m <sup>3</sup>	TWA: 0.005 ppm TWA: 0.05 mg/m <sup>3</sup>
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	STEL 0.01 ppm STEL 0.1 mg/m <sup>3</sup> TWA: 0.005 ppm TWA: 0.05 mg/m <sup>3</sup>	Skin STEL: 0.02 mg/m <sup>3</sup> TWA: 0.02 mg/m <sup>3</sup>	STEL: 0.09 mg/m <sup>3</sup> TWA: 0.03 mg/m <sup>3</sup>	TWA: 0.005 ppm TWA: 0.05 mg/m <sup>3</sup> STEL: 0.01 ppm	TWA: 0.005 ppm STEL: 0.015 ppm
Propylene carbonate 108-32-7	-	STEL: 6 ppm STEL: 25.5 mg/m <sup>3</sup> TWA: 6 ppm TWA: 25.5 mg/m <sup>3</sup>	-	-	-

### 8.2. Exposure Controls

#### Engineering Controls

Ensure good ventilation of the work station. Showers. Eyewash stations.

#### Personal Protective Equipment

##### Eye/Face Protection

Wear eye/face protection.

##### Hand Protection

Wear chemical resistant gloves.

##### Skin and Body Protection

Wear suitable protective clothing.

##### Respiratory Protection

Wear respiratory protection.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical state	Liquid		
Appearance	Viscous, beige liquid	Odour	Not determined
Colour	Beige	Odour Threshold	Not determined
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>	
pH	Not determined		
Melting point / freezing point	Not determined		
Boiling point / boiling range	>200 °C / >392 °F		
Flash point	>100 °C / >212 °F		
Evaporation Rate	<1		
Flammability (Solid, Gas)	Liquid-Not applicable		
Flammability Limit in Air			
Upper flammability or explosive limits	Not determined		
Lower flammability or explosive limits	Not determined		
Vapour Pressure	<0.01333 hPa		
Vapour Density	>1	(Air=1)	
Relative Density	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Water Solubility	Practically insoluble	
Solubility(ies)	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidising Properties	Not determined	

**9.2. Other information**

Liquid Density 1.288 g/cm<sup>3</sup>

**Section 10: STABILITY AND REACTIVITY**

**10.1. Reactivity**

Not reactive under normal conditions.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of Hazardous Reactions**

**Possibility of Hazardous Reactions**

None under normal processing.

**10.4. Conditions to Avoid**

Heat. Incompatible materials. Freezing. Moisture.

**10.5. Incompatible Materials**

Acids. Alcohols. Aluminum. Amines. Ammonia. Bases. Copper and its alloys. Fluorine. Iron. Isocyanates. Oxidizers. Phosphorus. Strong alkalis. Strong reducing agents. Water. zinc. humid air.

**10.6. Hazardous Decomposition Products**

May include and are not limited to: oxides of carbon. Hydrocarbons. Hydrogen cyanide. Isocyanates. Nitrogen oxides.

**Section 11: TOXICOLOGICAL INFORMATION**

**11.1. Information on Toxicological Effects**

**Acute toxicity**

**Product Information**

Inhalation	Harmful if inhaled.
Eye Contact	Not determined.
Skin Contact	Not determined.
Ingestion	Not determined.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	74,460.8933 mg/kg
ATEmix (inhalation-dust/mist)	1.1 mg/L

**Unknown Acute Toxicity**

- 49.5 % of the mixture consists of ingredient(s) of unknown toxicity.
- 12.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
- 48.01 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
- 49.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
- 49.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).
- 13.99 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
4,4- methylenediphenyl diisocyanate (MDI)	= 31600 mg/kg ( Rat )		= 369 mg/m <sup>3</sup> ( Rat ) 4 h
Propylene carbonate	= 29000 mg/kg ( Rat )	> 3000 mg/kg ( Rabbit )	

- Skin corrosion/irritation** Causes skin irritation.
- Serious eye damage/eye irritation** Causes serious eye irritation.
- Sensitisation** May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Germ cell mutagenicity** Not classified.
- Carcinogenicity** Suspected of causing cancer.

Chemical name	European Union
4,4- methylenediphenyl diisocyanate (MDI)	Carc. 2

- Reproductive toxicity** Not classified.
- STOT - single exposure** May cause respiratory irritation.
- STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure.
- Aspiration hazard** Not classified.

**Section 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Chemical name	Algae/aquatic plants	Fish	Crustacea
Propylene carbonate	500: 72 h Desmodesmus subspicatus mg/L EC50	1000: 96 h Cyprinus carpio mg/L LC50 semi-static	500: 48 h Daphnia magna mg/L EC50

**12.2. Persistence and Degradability**

Not determined.

**12.3. Bioaccumulative Potential**

Chemical name	Partition coefficient
Propylene carbonate	0.48



#### 12.4. Mobility in Soil

**Mobility**

Not determined.

#### 12.5. Results of PBT and vPvB Assessment

Not determined.

#### 12.6. Other Adverse Effects

Not determined.

### Section 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste Treatment Methods

**Waste from residues/unused products**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging**

Improper disposal or reuse of this container may be dangerous and illegal.

### Section 14: TRANSPORT INFORMATION

**IMDG**

14.2 Proper Shipping Name Not regulated

**RID**

14.2 Proper Shipping Name Not regulated

**ADR**

14.2 Proper Shipping Name Not regulated

**IATA**

14.2 Proper Shipping Name Not regulated

### Section 15: REGULATORY INFORMATION

#### 15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

**National Regulations**

France

**Occupational Illnesses (R-463-3, France)**

Chemical name	French RG number	Title
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	RG 62	

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

**Authorisations and/or restrictions on use:**

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**International Inventories**

Chemical name	TSCA	DSL/NDSL	EINECS/ELINCS	PICCS	ENCS	IECSC	AICS	KECL
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8 ( 35.51 )	X	X	X	X	X	X	X	X
Homopolymer of methylenediphenyl diisocyanate 25686-28-6 ( 10-15 )	X	X	X	X	X	X	X	X
Propylene carbonate 108-32-7 ( 1.49 )	X	X	X	X	X	X	X	X

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances

**15.2. Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

**Section 16: OTHER INFORMATION**

**Full text of H-Statements referred to under section 3**

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

**Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend**

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)  
 Ceiling Maximum limit value \* Skin designation

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Classification Procedure**

Calculation method

**Diisocyanates Statement**

'As from 24<sup>th</sup> August 2023, adequate training is required before industrial or professional use of this product.'

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**Issue Date:** 19-Jul-2022

**Revision Date:** 10-Aug-2023

**Revision Note:** New format 2022, Diisocyanate statement 2023

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2015/830**

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**