

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

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

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

Eye Contact	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.
Skin Contact	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.
Inhalation	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.
Ingestion	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

Symptoms	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

Notes to Physician	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 ³	TWA: 0.01 ppm TWA: 0.1 mg/m ³ STEL: 0.02 ppm STEL: 0.2 mg/m ³	TWA: 0.005 ppm TWA: 0.052 mg/m ³	TWA: 0.05 mg/m ³ H*
Propylene carbonate 108-32-7	-	-	-	-	TWA: 2 ppm TWA: 8.5 mg/m ³
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	-	TWA: 0.005 ppm	-	STEL: 0.035 mg/m ³	TWA: 0.005 ppm TWA: 0.05 mg/m ³
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	STEL 0.01 ppm STEL 0.1 mg/m ³ TWA: 0.005 ppm TWA: 0.05 mg/m ³	Skin STEL: 0.02 mg/m ³ TWA: 0.02 mg/m ³	STEL: 0.09 mg/m ³ TWA: 0.03 mg/m ³	TWA: 0.005 ppm TWA: 0.05 mg/m ³ 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 ³ TWA: 6 ppm TWA: 25.5 mg/m ³	-	-	-

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	Odour	Not determined
Appearance	Viscous, beige liquid	Odour Threshold	Not determined
Colour	Beige		
Property	Values	Remarks • Method	
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/cm³

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 ³ (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 24th August 2023, adequate training is required before industrial or professional use of this product.’

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