Safety Data Sheet

Issue Date: 19-Jul-2022 **Revision Date:** 10-Aug-2023 **Version** 1

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

Full text of H- and EUH-phrases: see section 16
This product does not contain candidate substances of very high concern at a concentration >=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.

4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

Notes to Physician Treat symptomatically.

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/m³	TWA: 0.01 ppm TWA: 0.1 mg/m³ STEL: 0.02 ppm STEL: 0.2 mg/m³	TWA: 0.005 ppm TWA: 0.052 mg/m³	TWA: 0.05 mg/m³ H*
Propylene carbonate 108-32-7	-	-	-	-	TWA: 2 ppm TWA: 8.5 mg/m³
Chemical name	**Italy**	**Portugal**	**Netherlands**	**Finland**	**Denmark**
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	-	TWA: 0.005 ppm	-	STEL: 0.035 mg/m³	TWA: 0.005 ppm TWA: 0.05 mg/m³
Chemical name	**Austria**	**Switzerland**	**Poland**	**Norway**	**Ireland**
4,4- methylenediphenyl diisocyanate (MDI) 101-68-8	STEL 0.01 ppm STEL 0.1 mg/m³ TWA: 0.005 ppm TWA: 0.05 mg/m³	Skin STEL: 0.02 mg/m³ TWA: 0.02 mg/m³	STEL: 0.09 mg/m³ TWA: 0.03 mg/m³	TWA: 0.005 ppm TWA: 0.05 mg/m³ STEL: 0.01 ppm	TWA: 0.005 ppm STEL: 0.015 ppm
Propylene carbonate 108-32-7	-	STEL: 6 ppm STEL: 25.5 mg/m³ TWA: 6 ppm TWA: 25.5 mg/m³	-	-	-

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
Colour Beige
Odour Not determined
Odour Threshold Not determined

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	

Property	Values	Remarks • Method
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	**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**		
TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

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