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Material Safety Data Sheet

Fastcast PU PART B

1. IDENTIFICATION OF SUBSTANCE

Name of Substance or Preparation: Fastcast PU Part B

2. COMPOSITION OF INGREDIENTS

Substance?	No	Substance Name:	No
CAS No:	N/A	EC Index Number:	N/A
EEC Number:	N/A		

Components Contributing to Hazard Classification	% by Wt.	CAS No.	Hazard	Risk phrases
Diphenylmethane diisocyanate, isomers and homologues	30-60	9016-87-9	Harmful	R20, R36/37/38, R42/43
Diphenylmethane 4,4'- diisocyanate	30-60	101-68-8	Harmful	R20, R36/37/38, R42/43
Diphenylmethane-2,4'- diisocyanate	3-7	5873-54-1	Harmful	R20, R36/37/38, R42

3. HAZARDS IDENTIFICATION

CHIP Classification:	Xn	HARMFUL
Risk Phrases:	R20 R36/37/38 R42/43	Harmful by inhalation Irritating to eyes, respiratory system, and skin. May cause sensitisation by inhalation and skin contact.
Other Information:	Vapour hazard is low at room temperature. If heated or sprayed high concentrations can be attained that could be hazardous on single exposure and may cause irritation of upper respiratory tract and lungs. Exposure to vapour may cause sensitisation in susceptible individuals. Contact with eyes may cause irritation with corneal injury. Reacts slowly with water to produce carbon dioxide which may rupture closed containers. This reaction accelerates at higher temperatures.	

4. FIRST AID MEASURES

Immediate medical attention required?	Yes
Professional assistance from physician required?	Yes
Inhalation:	Remove to fresh air and allow to rest. If not breathing give artificial respiration. Obtain medical attention and keep under observation for up to 48 hours as effects can be delayed.
Skin Contact:	Wash contaminated area with soap and water. Use skin cream to prevent dryness. Launder contaminated clothing. If symptoms develop obtain medical attention.
Eye Contact:	Flush immediately with water for 10-15 minutes prising eyelids open with fingers. Seek medical attention immediately.
Ingestion:	If patient is conscious, wash out mouth with water and give 500mL (half a pint) of water to drink. Do not induce vomiting. Seek immediate medical attention.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media:	Foam, dry chemical, CO2, water in large quantities.
Not to be used:	Small quantities of water.
Other Comments:	Where large quantities are involved breathing apparatus should be used.
Special Exposure Hazards:	May produce toxic vapours during combustion.
Special Fire Fighting Procedures:	Evacuate downwind personnel.
Protective Equipment Required:	Positive pressure self-contained breathing apparatus should be used.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Evacuate unnecessary personnel. Wear suitable protective clothing including positive pressure self-contained breathing apparatus
Environmental Precautions:	Do not allow to enter drains or watercourses
Clean-Up Procedures:	Supplies of suitable decontaminant should be readily available. Contact ABL Limited for details if required. Cover spillage with solid decontaminant, sawdust, sand or earth and allow to react for 30 minutes minimum. Sweep into open drums and remove for further decontamination and disposal. Wash spillage area with water and test for isocyanate vapours before allowing personnel into the area.

7. HANDLING & STORAGE

Handling:	Do not allow to come into contact with water. Do not breathe vapour or spray. Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Use only in a well ventilated place with local exhaust ventilation where necessary to ensure that the OEL for MDI is not exceeded.
Storage:	Contact with moisture liberates carbon dioxide gas, which can cause dangerous pressure build-up in closed containers. Store in a dry place at 5-25°C in tightly sealed original containers.
Suitable containers:	Stainless Steel or Mild Steel
Unsuitable containers:	Copper, Copper Alloy and Galvanised surfaces.

8. EXPOSURE CONTROLS

Take Measures to Prevent:	Build up of vapours. Contact with water or atmospheric moisture. Inhalation of vapour. Contact with skin and eyes.
Exposure Control Limits:	Isocyanates (all) - MEL: Long Term (8 hour) 0.02 mg/m ³ / Short Term (15 min.) 0.07 mg/m ³
Respiratory Protection:	Vapour levels should be maintained below the control limits. Where necessary use suitable breathing equipment.
Hand Protection:	Wear suitable gloves (Neoprene, nitrile butadiene rubber, butyl rubber, .heavy duty PVC, laminated polyethylene)
Skin Protection:	Wear suitable protective clothing.
Eye Protection:	Wear goggles or safety glasses. Locate eyewash bottle in immediate area of work.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Liquid	Explosive Properties:	N/A
Colour:	Dark brown	Oxidising Properties:	N/A
pH:	N/A	Vapour Pressure:	- 0.000004 mmHg @ 20°C (MDI)
Boiling Point:	>300°C (MDI)	Relative Density:	- 1.23
Melting Point:	N/A	Solubility in Water:	Insoluble, reacts with evolution of CO ₂
Flashpoint:	230°C (open cup)	Other:	
Auto-ignition Temperature:	>600°C (MDI)	Flammable Limits:	N/A
Key:	N/A - Not Applicable,		N/M - Not Measured

10. STABILITY & REACTIVITY

Conditions to Avoid:	Excessive heat.
Materials to Avoid:	Acids, alcohols, amines, bases, water, galvanised metals, copper and its alloys.
Hazardous Decomposition Products:	Oxides of nitrogen and carbon, hydrogen cyanide, other hazardous gaseous products.

11. TOXICOLOGICAL INFORMATION

Diphenylmethanediisocyanate, isomers and homologues	LD50	>5000mg/kg	Oral	Rat
	LD50	>5000mg/kg	Dermal	
	LC50	0.49mg/L (4 hrs)	Rabbit	
Diphenylmethane 4, 4'- diisocyanate			Inhalation	Rat
	LD50	>5000mg/kg	Oral	Rat
	LD50	>5000mg/kg	Dermal	
	LC50	0.49mg/L (4 hrs)	Rabbit	
			Inhalation	Rat

12. ECOLOGICAL INFORMATION

Reaction with water produces insoluble polyurea, which is estimated from static laboratory conditions to have a low level of biodegradation. It is unlikely that significant environmental exposure in the air or water will arise.

Ecotoxicity Data

Diphenylmethanediisocyanate, isomers and homologues	Zebra Fish (LC50)	96 hours	>1000mg/l
	Daphnia magna (EC50)	48 hours	>1000mg/l
	E.coli (IC50)	48 hours	>100mg/l
Diphenylmethane 4,4'- diisocyanate	Zebra Fish (LC50)	96 hours	>1000mg/l
	Daphnia magna (EC50)	48 hours	>1000mg/l
	E.coli (IC50)	48 hours	>100mg/l

13. DISPOSAL CONSIDERATIONS**Likely residues and waste products:**

Small quantities of waste should be reacted with polyol to neutralise prior to disposal. Empty drums should be decontaminated and scrapped.

Safe handling of residues and waste product:

Dispose of neutralised residues by controlled incineration or approved landfill in accordance with local authority regulations. Do not dispose of unreacted product down drains, sewers or watercourses.

14. TRANSPORT INFORMATION**Proper Shipping Name:** -

UN No.: -

ADR/VLG: -

ADNR/VBG: -

RID/VSG: -

IMO/IMDG: -

ICAO/IATA: -

This product is not classified as hazardous for transport.

15. REGULATORY INFORMATION**Supply Label Information:****Risk Phrases:**

HARMFUL

R20

Harmful by inhalation

R36/37/38

Irritating to eyes, respiratory system and skin

R42/43

May cause sensitisation by inhalation and skin contact

Safety Phrases:

S23

Do not breathe vapour or spray

S36/37

Wear suitable protective clothing and gloves

S38

In case of insufficient ventilation, wear suitable respiratory equipment

S45

In case of accident or if you feel unwell, seek medical advice immediately (show this label where possible).

Other:

Contains Diphenylmethane 4, 4' - diisocyanate

16. OTHER INFORMATION**Training advice:**

Please read all datasheets carefully. If any point remains unclear or if further training is required please contact ABL(STEVENS) Limited.

Recommended uses and restrictions:

Isocyanate component for two-part polyurethane in conjunction with a polyol. No other use recommended.

Further information sources:

Please refer to the Safety Data Sheet for the accompanying polyol for further information.

Sources of key data used to compile this SDS:

Raw material data. Occupational Exposure Limits 1997. Guidance Note EH40/98. Approved Supply List (CHIP Regulations 1996).

This Safety Data Sheet has been prepared and supplied in accordance with the **Chemicals (Hazard Identification and Packaging) Regulations 1994** as amended for use by persons capable of understanding the information contained herein for the protection of the health and safety of users.

It is therefore important that this data sheet is passed to the appropriate person so that the information may be acted upon if necessary.

Changes since the last version will be highlighted in the margin. This version replaces all previous versions.

NOTE: This SDS has been prepared from information we believe to be reliable, however it is provided without warranty, expressed or implied, as to its correctness. Since the conditions of handling, storage, use and disposal of this material are beyond our control we accept no responsibility whatsoever for any loss, damage or expense which results from the handling, storage, use or disposal of this material.
