

# MATERIAL SAFETY DATA SHEET

Reviewed on:

21-6-2006

## 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

**Article number:** MBPUS - part A**Product name:** Mega Bon PU Speed - part A**Supplier:** Innosystems NI Ltd**Emergency phone:** +44 (0) 28 30 830 006

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS no	EINECS no	% by Wt	Hazard symbol	R-phrase
4,4'-Methylenediphenyl diisocyanate	101-68-8	202-966-0	25 - <50	Xn	20, 36/37/38, 42/43
Diphenylmethanediisocyanate, isomeres and homologues	9016-87-9		25 - <50	Xn	20, 36/37/38, 42/43
Polypropylene glycol	25322-69-4		25 - <50	Xn	22

## 3. HAZARDS IDENTIFICATION

**Main Hazard:** R 20/22: Harmful by inhalation and if swallowed. R 36/37/38: Irritating to eyes, respiratory system and skin. R 42/43: May cause sensitisation by inhalation and skin contact.

## 4. FIRST AID MEASURES - ACTION

**General information:** Remove contaminated soaked clothing immediately and dispose of safely.

**Skin contact:** In case of contact with skin wash off immediately with soap and water. Consult a doctor if skin irritation persists.

**Eye contact:** In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

**Ingestion:** Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Supply with medical care.

**Inhalation:** Ensure supply of fresh air. In the event of symptoms refer for medical treatment.

## 5. FIRE-FIGHTING MEASURES

**Extinguishing media:** Foam. Dry powder. Water spray jet. Carbon dioxide.

**Exposure hazards:** Risk of formation of toxic pyrolysis products. In the event of fire the following can be released: Nitrogen oxides (NOx). Hydrogen cyanide (HCN).

**Protection of fire-fighters:** Use self-contained breathing apparatus. Do not inhale explosion and/or combustion gases.

**Exceptional hazards:** Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:** Use personal protective clothing. Use breathing apparatus if exposed to vapours/dust/aerosol. High risk of slipping due to leakage/spillage of product.

**Environmental precautions:** Do not discharge into the drains/ surface waters/ groundwater. Prevent spread over a wide area (e.g. by containment or oil barriers).

**Clean-up procedures:** Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with the regulations.

## 7. HANDLING AND STORAGE

**Handling requirements:** Provide suitable extraction at the processing machines. Use only in wellventilated areas.

**Storage conditions:** Prevent penetration into the ground. Keep only in original container. Do not store together with oxidizing agents.

**Storage classification:** Keep container tightly closed. Keep container in a well-ventilated place. Store in a dry place.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

	LT - mg/m <sup>3</sup>
4,4'-Methylenediphenyl diisocyanate	0.02
Diphenylmethanediisocyanate, isomeres and homologues	0.02

**Respiratory protection:** Breathing apparatus in the event of high concentrations.

**Hand protection:** Butyl rubber, >120 min (EN 374)

**Eye protection:** Safety glasses.

**Skin protection:** Light protective clothing.

**Other protection:** Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols.

**Hygiene measures:** At work do not eat, drink, smoke or take drugs. After worktime and before work breaks the affected skin areas must be thoroughly cleaned. Use barrier skin cream.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**State:** Liquid

**Colour:** Dark brown

**Odour:** Characteristic

**Boiling point/range°C:** 208

**Vapour pressure:** < 0.1 mmHg

**Flash point°C:** 213

**Solubility in water:** reacts with water

**Relative density:** 1.2

**10. STABILITY AND REACTIVITY**

**Materials to avoid:** Reactions with water. Reactions with alcohols, amines, aqueous acids and alkalis.

**Hazard decomposition products:** No hazardous decomposition products known.

**11. TOXICOLOGICAL INFORMATION**

**General information:** No toxicological data are available. The product was classified on the basis of the calculation procedure of the preparation directive.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** Ecological data are not available.

**13. DISPOSAL CONSIDERATIONS**

**Disposal operations:** Dispose of as hazardous waste. Coordinate disposal with the authorities if necessary. Waste no. (recommended): 080501.

**Disposal of packaging:** Uncontaminated packaging may be taken for recycling. Packaging that cannot be cleaned should be disposed of as for product.

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## 14. TRANSPORT INFORMATION

### ADR

**ADR class:** not classified

### IMDG

**IMDG class:** not classified

### ICAO/IATA

**ICAO/IATA class:** not classified

## 15. REGULATORY INFORMATION

### Hazard symbols



Harmful

### Contains:

4,4'-Methylenediphenyl diisocyanate & Diphenylmethanediisocyanate, isomeres and homologues & Polypropylene glycol

### Risk phrases

R42/43 - May cause sensitization by inhalation and skin contact

R36/37/38 - Irritating to eyes, respiratory system and skin

R20/22 - Harmful by inhalation and if swallowed

### Safety phrase(s)

S23 - Do not breathe gas/fumes/vapor/spray (appropriate wording to be specified by the manufacturer)

S36/37 - Wear suitable protective clothing and gloves

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)

**EG-richtlijnen:** EEC: 91/155 (2001/58); 67/548 (2004/73), 29. ATP; 1999/45 (2001/60); 91/689 (2001/118); 89/542; 1999/13; 2004/42

## 16. ADDITIONAL INFORMATION

### Risk phrases used in S2

R20 - Harmful by inhalation

R22 - Harmful if swallowed

R36/37/38 - Irritating to eyes, respiratory system and skin

R42/43 - May cause sensitization by inhalation and skin contact

### Legal

#### disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

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**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING****Article number:** MBPUS - part B**Product name:** Mega Bond PU Speed - part B**Supplier:** Innosystems NI Ltd**Emergency phone:** +44 (0) 28 30 830 006**2. COMPOSITION / INFORMATION ON INGREDIENTS**

Ingredient	CAS no	EINECS no	% by Wt	Hazard symbol	R-phrase
2,2'-Dimethyl-4,4'-methylenbis(cyclohexylamine)	6864-37-5	229-962-1	1 - <3	N, C, T	22, 23/24, 35, 51/53
4,6-Diethyl-2-methyl-1,3-benzenediamine	68479-98-1	270-877-4	2.5 - <5	N, Xn	21/22, 36, 48/22, 50/53
Ethylenediamine, propoxylated	25214-63-5	500-035-6	20 - <40	Xi	36
Polyoxypropylendiamine	9046-10-0		1 - <5	C	34

**3. HAZARDS IDENTIFICATION****Main Hazard:** R 36/38: Irritating to eyes and skin. R 51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.**4. FIRST AID MEASURES - ACTION****General information:** Change soaked clothing.**Skin contact:** When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.**Eye contact:** In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.**Ingestion:** Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Supply with medical care.**Inhalation:** Ensure supply of fresh air. In the event of symptoms refer for medical treatment.**5. FIRE-FIGHTING MEASURES****Extinguishing media:** Foam. Dry powder. Water spray jet. Carbon dioxide.**Exposure hazards:** Risk of formation of toxic pyrolysis products. In the event of fire the following can be released: Nitrogen oxides (Nox).**Protection of fire-fighters:** Use self-contained breathing apparatus. Do not inhale explosion and/or combustion gases.**Exceptional hazards:** Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.**6. ACCIDENTAL RELEASE MEASURES****Personal precautions:** Use personal protective clothing. Use breathing apparatus if exposed to vapours/dust/aerosol. High risk of slipping due to leakage/spillage of product.**Environmental precautions:** Do not discharge into the drains/ surface waters/ groundwater. Prevent spread over a wide area (e.g. by containment or oil barriers).**Clean-up procedures:** Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with the regulations.**7. HANDLING AND STORAGE****Handling requirements:** Use only in well-ventilated areas. Avoid spilling or spraying in enclosed areas.**Storage conditions:** Prevent penetration into the ground. Keep only in original container. Do not store together with acids. Do not store together with oxidizing agents.**Storage classification:** Keep container tightly closed. Keep container in a well-ventilated place. Store in a dry place.

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Respiratory protection:** Breathing apparatus in the event of high concentrations.

**Hand protection:** Butyl rubber, >120 min (EN 374)

**Eye protection:** Safety glasses.

**Skin protection:** Light protective clothing.

**Other protection:** Avoid contact with eyes and skin. Do not inhale gases/vapours/aerosols.

**Hygiene measures:** At work do not eat, drink, smoke or take drugs. After worktime and before work breaks the affected skin areas must be thoroughly cleaned. Use barrier skin cream.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**State:** Liquid

**Colour:** Black

**Odour:** Characteristic

**Flash point°C:** 160

**Solubility in water:** Miscible

**Relative density:** 1.1

## 10. STABILITY AND REACTIVITY

**Materials to avoid:** Reactions with acids and strong oxidizing agents.

**Hazard decomposition products:** No hazardous decomposition products known.

## 11. TOXICOLOGICAL INFORMATION

**General information:** No toxicological data are available. The product was classified on the basis of the calculation procedure of the preparation directive.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** Ecological data are not available.

## 13. DISPOSAL CONSIDERATIONS

**Disposal operations:** Dispose of as hazardous waste. Coordinate disposal with the authorities if necessary. Waste no. (recommended): 080409

**Disposal of packaging:** Uncontaminated packaging may be taken for recycling. Packaging that cannot be cleaned should be disposed of as for product.

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**14. TRANSPORT INFORMATION****ADR****ADR class:** 9**Classification code:** III**UN no:** 3082**Hazard label:** 90**Description of goods:** UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Diethylmethylbenzenediamine), 9, III**IMDG****IMDG class:** 9**UN no:** 3082**Label:** 9**EMS no:** F-A, S-F**Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s. (4,6-Diethyl-2-methyl-1,3-benzenediamine), UN 3082, Class: 9**ICAO/IATA****ICAO/IATA class:** 9**UN no:** 3082**Label:** Miscellaneous**Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s. (4,6-Diethyl-2-methyl-1,3-benzenediamine) UN 3082**15. REGULATORY INFORMATION****Hazard symbols**

Irritant



Dangerous for the environment

**Risk phrases**

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R36/38 - Irritating to eyes and skin

**Safety phrase(s)**

S24 - Avoid contact with skin

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S60 - This material and/or its container must be disposed of as hazardous waste

**EG-richtlijnen:** EEC: 91/155 (2001/58); 67/548 (2004/73), 29. ATP; 1999/45 (2001/60); 91/689 (2001/118); 89/542; 1999/13; 2004/42

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## 16. ADDITIONAL INFORMATION

### Risk phrases used in S2

R21/22 - Harmful in contact with skin and if swallowed

R22 - Harmful if swallowed

R23/24 - Toxic by inhalation and in contact with skin

R34 - Causes burns

R35 - Causes severe burns

R36 - Irritating to the eyes

R48/22 - Harmful danger of serious damage to health by prolonged exposure if swallowed

R50/53 - Very Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R51/53 - Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

### Legal

#### disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.