

Material Safety Data Sheet

NON HAZARDOUS – CHEMICAL IDENTIFICATION CODE NOT APPLICABLE

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

Product Name	:	HYDROTHANE HP, part A
HS Code	:	32149090
Application	:	Two Component, Solvent Free Spray Applied Pure Polyurea Coating
Manufacturer	:	MATEX CONSTRUCTION CHEMICALS MANUFACTURING CO. L.L.C.
Address	:	P.O. Box 29585
Telephone	:	+971 4 3334140
Fax	:	+971 4 3334115
Email	:	info@matex.ae
Website	:	www.matex-global.com

2. HAZARDS IDENTIFICATION:

Classification of the substance or mixture

According to (EC) No 1272/2008 (CLP)

Carc. 2:	H351 Suspected of causing cancer
STOT RE2:	H373 May cause damage to organs through prolonged or repeated Exposure if swallowed.
Resp. Sens. 1:	H334 May cause allergy or asthma symptoms or breathing difficulties if Inhaled
Acute Tox. 4:	H332 Harmful if inhaled
Eye Irrit. 2:	H319 Causes serious eye irritation
Skin Sens. 1:	H317 May cause an allergic skin reaction
Skin Irrit. 2:	H315 Causes skin irritation
STOT SE 3:	H335 May cause respiratory irritation

According to Regulation 67/548/EEC or 1999/45/EC

Xn, Harmful – R20: Harmful by inhalation
Xi, Irritant – R36/37/38: irritating to eyes, respiratory system and skin
Xn, carcinogen category 3 – R40: Limited evidence of a carcinogenic effect
Sensitizing – R42/43: May cause sensitisation by inhalation and skin contact
Xn, Harmful – R48/20: Harmful – danger of serious damage to health by prolonged exposure through inhalation

Label Elements: The product is classified and required to be labelled in accordance with EC-directives

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Labelling according to Regulation (EC) 1272/2008

Hazard Pictograms



Signal Word

Danger

Contains

Polyoxy (methyl-1,2-ethanediyl), alpha-hydro-omega-hydroxy-polymer
With 1, 1-methylenebisocyanatobenzene

4,4 – Methylenediphenyl diisocyanate

Reaction mass of 4,4-methylenediphenyl diisocyanate and o-(p-Isocyanatobenzyl) phenyl isocyanate

4,4 – Methylenediphenyldiisocyanate, oligomers

Hazard Statements

H351 Suspected of causing cancer
H373 May cause damage to organs through prolonged or repeated exposure if swallowed
H334 may cause allergy or asthma symptoms or breathing difficulties if inhaled
H332 Harmful if inhaled
H319 Causes serious eye irritation
H317 May cause an allergic skin reaction
H315 Causes skin irritation
H335 may cause respiratory irritation

Precautionary Statements

P260 Do not breathe vapours/spray
P280 Wear protective gloves/protective clothing/eye protection/face protection
P284 In case of inadequate ventilation wear respiratory protection
P302+P352 IF ON SKIN: Wash with plenty of water/soap
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes Remove contact lenses, present and easy to do. Continue rinsing
P311 Call a POISON CENTER/doctor

Special labelling

EUH204 Contains isocyanates. May produce an allergic reaction

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Other Hazards Further hazards were not determined with the current level of knowledge

3. COMPOSITION / INFORMATION ON INGREDIENTS:

The product is a mixture.

Range (1%)	Substance
60 - <100	Polyoxy (methyl-1,2-ethanediyl), alpha-hydro-omega-hydroxy-polymer with 1, 1-methylenebisisocyanatobenzene CAS: 39420-98-9, EINECS/ELINCS: polymer GHS/CLP: Acute Tox. 4: H332 – Skin Irrit. 2: H315 – Eye Irrit. 2: H319 – Resp. Sens. 1: H334 – Skin Sens. 1: H317 – Care. 2: H351 – STOT SE 3: H335 – STOT RE 2: H374 EEC: Xn, R20-36/37/38-40-42/43-48/20
13 - <30	4,4'-Methylenediphenyl diisocyanate CAS: 101-68-8, EINECS/ELINCS: 202-966-0, EU-INDEX: 615-005-00-9, ECB-NR 01-2119457014-47-XXXX GHS/CLP: Care. 2: H351 – Acute Tox. 4: H332 – STOT RE 2: H373 – Eye irrit. 2: H319 – STOT SE 3: H335 – Skin Irrit. 2: H315 – Resp. Sens. 1: H334 – Skin Sens. 1: H317 EEC: Xn, R 20-36/37/38-40-42/43-48/20
3 - <7	4,4'-Methylenediphenyldiisocyanate, oligomers CAS 25686-28-6, EINECS/ELINCS: 500-040-3, ECB-Nr.: 01-211945 7013-49-XXX GHS/CLP: Scute Tox. 4: H332 – Skin Irrit. 2: H315 – Eye Irrit. 2: H319 – Resp. Sens. 1: H334 – Skin Sens. 1: H317 – Care 2: H351 – STOT RE 2: H373 EEC; Xn, R 40-20-42/43-48/20-36/37/38
3 - <7	Reaction mass of 4,4 methylenediphenyl diisocyanate and o(p-Isocyanatobenzyl)phenyl isocyanate EINECS/ELINCS: 905-806-4, ECB-Nr.: 01-211945 7013-49-XXXX GHS/CLP: Care. 2: H351 – Acute Tox. 4: H332 – STOT RE 2: H373 – Eye Irrit. 2: H319 – STOT SE 3: H335 – Skin Irrit. 2: H315 – Resp. Sens. 1: H334 – Skin Sens. 1: H317 EEC: Xn, R20-36/37/38-40-42/43-48/20

Comment on component parts Substances of very high concern – SVHC: substances are not contained or are below 0.1%. For full test of H-statement and R-phrases: see SECTION 16

4. FIRST AID MEASURES:

General Info

: Take off contaminated clothing and wash before reuse

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Eyes	:	Irrigate immediately with copious quantities of water for several minutes. Obtain medical attention urgently if symptoms persist.
Skin	:	Wash immediately with copious quantities of water with soap. Remove contaminated clothing immediately. Obtain medical advice if skin disorders develop.
Inhalation	:	Remove from exposure, rest and keep warm and obtain medical attention urgently.
Ingestion	:	Wash out mouth with water. DO NOT induce vomiting. Obtain medical attention

Most important symptoms and effects (both acute and delayed)

: Irritant effects, allergic reactions, redness, gastro-Intestinal complaints, cough

Indication of any immediate medical attention and special treatment needed

: Treat symptomatically
: Keep under medical supervision for at least 48 hours

5. FIRE FIGHTING MEASURES:

Suitable Extinguishing Media	:	Foam, dry powder, water spray jet, carbon dioxide
Extinguishing media that must not Be used	:	Full water jet
Specific Hazards	:	Oxides of carbon and nitrogen may be emitted. Isocyanate, Hydrogen Cyanide
Special Protective Precaution and Equipment	:	Fire fighters to wear self-contained breathing apparatus and suitable protective clothing
	:	Do not inhale explosion and /or combustion gases
	:	Cool containers at risk with water spray jet
	:	Fire residues and contaminated firefighting water must be disposed of in accordance with local regulations

6. ACCIDENTAL RELEASE MEASURES:

Personal Precautions	:	Ensure adequate ventilation
	:	Use breathing apparatus if exposed to vapour/aerosol
	:	Use personal protective equipment
	:	Remove persons to safety
Environmental Precautions	:	High risk of slipping due to leakage/spillage of product
	:	Prevent entry into drains, sewers and water courses.

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- After spillage/leakage** :
- : Prevent spread over a wide area (e.g by containment or oil barriers)
 - : In case of product spills into drains/surface waters/ groundwater, immediately inform the authorities
 - : Pickup with absorbent material (e.g sand, universal absorbent, diatomaceous earth)
 - : Dispose of absorbed material in accordance with the regulations

In addition, please refer to the local regulations regarding disposal.

7. HANDLING AND STORAGE:

- Precautions for safe handling** :
- Use only in well-ventilated areas
 - Provide suitable vacuuming at the processing area
 - Avoid spilling or spraying in enclosed areas
- The product is combustible
- Do not eat, drink, smoke or take drugs at work
 - Take off contaminated clothing and wash before reuse
 - It is recommended to preview eye-wash bottle and showers
 - Wash hands before breaks and after work
 - Use barrier skin cream

Conditions for safe storage, including any incompatibilities

- : Prevent penetration into the ground
 - Keep only in original container
- Do not store with amines
 - Keep away from water
 - Do not store together with oxidizing agents
- Keep container tightly closed
 - Keep container in a well-ventilated place
 - Keep in a cool place. Store in a dry place
 - Protect from heat/overheating and from sun
- Storage class 10 (VCI)

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

Control Parameters

Ingredients with occupational exposure limits to be monitored (GB)

Range (%)	Substance
60 – 100	Polyoxy(methyl-1,2-ethanediyl), alpha-hydro-omega-hydroxy-polymer With 1, 1-methylenebisocyanatobenzene CAS: 39420-98-9, EINECS/ELINCS: polymer Long-term exposure: 0.02 mg/m ³ , as NCO, Sen Short-term exposure (15-minute): 0.07 mg/m ³
3 – 7	Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-Isocyanatobenzyl)phenyl isocyanate EINECS/ELINCS: 905-806-4, ECB-Nr: 01-2119457015-45-XXXX Long-term exposure: 0.02 mg/m ³ , as NCO, Sen Short-term exposure (15-minute): 0.07 mg/m ³
3 – 7	4,4'-methylenediphenyldiisocyanate, oligomers CAS: 25686-28-6, EINECS/ELINCS: 500-040-3, ECB-Nr: 01-211945 7013-49 XXX Long-term exposure: 0.02 mg/m ³ , as NCO, Sen Short-term exposure (15-minute): 0.07 mg/m ³
13 – 30	4,4' Methylenediphenyl diisocyanate CAS: 101-68-8, EINECS/ELINCS: 202-966-0, EU-INDEX: 615-005-00-9 ECB Nr: 01-2119457014-47-XXXX Long-term exposure: 0.02 mg/m ³ , as NCO, Sen Short-term exposure (15-minute): 0.07 mg/m ³

DNEL

Range (%)	Substance
13 – 30	4,4'-methylenediphenyl diisocyanate, CAS: 101-68-8 Industrial, inhalative, long-term – local effects: 0.05 mg/m ³ Industrial, inhalative: long-term – systematic effects: 0.05 mg/m ³ Industrial, inhalative, Acute – local effects: 0.1 mg/m ³ Industrial, inhalative, Acute – local effects: 0.1 mg/m ³ Industrial, dermal, acute – local effects: 28.7 mg/cm ³ Industrial, dermal, acute – systematic effects: 50 mg/kg

PNEC

Range (%)	Substance
13 – 30	4,4'-methylenediphenyl diisocyanate, CAS: 101-68-8 Sewage treatment plants (STP), >1 mg/l Soil, >1 mg/kg Seawater, >0.1 mg/l Freshwater, >1 mg/l

Exposure controls

Additional advice on system design

Ensure adequate ventilation on work station
Using suitable discharge or exhausts ventilation

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Eye protection	Safety glasses
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information In full contact: Butyl rubber, >480 min (EN 374) Nitrile rubber, >480 min (EN 374) Viton, >480 min (EN 374) Polychlorophene, >480 min (EN 374)
Skin Protection	Impermeable protective and long-sleeved work clothing
Other	Avoid contact with eyes and skin Do not breathe vapour/spray Personal protective equipment should be selected specifically for the Working place, depending on concentration and quantity of the Hazardous substances handled. The resistance of this equipment/s To chemicals should be ascertained with the respective supplier
Respiratory protection	Breathing apparatus In the event of high concentrations Short term: filter apparatus, filter A
Thermal hazards	No information available
Delimination and monitoring	Of the environmental exposition Protect the environment by applying appropriate control to prevent Or limit emissions

9. PHYSICAL AND CHEMICAL PROPERTIES:

Form	:	Viscous liquid
Colour	:	Yellowish
Odour	:	characteristics
Odour threshold	:	not determined
pH value	:	not applicable
pH value (1%)	:	not applicable
Boiling point (°C)	:	not determined
Flash point (°C)	:	not determined
Flammability (°C)	:	not applicable
Lower explosion limit	:	not determined
Upper explosion limit	:	not determined
Oxidizing properties	:	no
Vapour pressure/gas pressure (kPa)	:	not determined
Density (g/ml)	:	1.09 – 1.13 (20°C)
Bulk Density (kg/m³)	:	not applicable

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Solubility in water	:	immiscible
Partition coefficient (n-octanol/water)	:	not determined
Viscosity	:	600 – 1000 mPas (25°C)
Relative vapour density determined in air	:	not determined
Evaporation speed	:	not determined
Melting point (°C)	:	not determined
Autoignition temperature (°C)	:	not determined
Decomposition temperature (°C)	:	not determined

10. STABILITY AND REACTIVITY:

Reactivity	:	no dangerous reactions known if used as directed In closed containers rise of pressure
Chemical stability	:	Stable under normal ambient conditions (ambient Temperature). Polymerization may occur at elevated temperature.
Possibility of hazardous reactions	:	Reactions with water, with formation of carbon dioxide Reactions with strong oxidizing agents Exothermic reaction at: Reactions with alcohols Reactions with amines
Conditions to avoid	:	Strong heating Water
Hazardous Decomposition Products	:	In the event of fire: see SECTION 5
Hazardous reaction	:	Hazardous polymerization will not occur

11. TOXICOLOGICAL INFORMATION:

Information of toxicological effects

Acute toxicity

Range (%)	Substance
3 – 7	4,4'-Methylenediphenyldiisocyanate, oligomers, CAS: 25686-28-6 NOEC: < 4 mg/m ³ /90d (OECD 413) NOEC: 0.2 mg/m ³ (OECD 453) LD50, dermal, rabbit: >9400 mg/kg LD50, oral, rat (female): > 5000 mg/kg LC50, inhalative, Rat: 0.49 mg/l/4h NOAEL, Rat: 12 mg/m ³ (OECD 414)

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Inhalative, conversion value: 1.5 mg/l/4h (dust/mist)
 LD50, dermal, Rabbit: >9400 mg/kg (OECD 402)
 LD50, oral, Rat: > 2000 mg/kg
 LC50, inhalative, Rat: >2.24 mg/l/1h (OECD 403)
 LC50, inhalative, Rat: 0.368 mg/l/4h (OECD 403)

Serious eye damage/irritation	:	irritant
Skin corrosion/irritation	:	irritant
Respiratory or skin sensitisation	:	Sensitizing
Specific target organ toxicity		
Single exposure	:	STOT SE-3
Specific target organ toxicity		
Repeated exposure	:	May cause damage to organs through prolonged or repeated exposure if swallowed
Mutagenicity	:	no classification
Reproduction toxicity	:	no classification
Carcinogenity	:	limited evidence of a carcinogenic effect
General remarks	:	The following applies to cyanogen compounds/nitriles in general: utmost caution! Release of hydrocyanic acid is possible – blockade of cellular respiration. Cardiovascular disorders, dyspnea, unconsciousness

Toxicological data of complete product are not available
 The toxicity data listed pertaining to the ingredients are intended for those working in the medical professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

12. ECOLOGICAL INFORMATION:

Toxicity

Range (%)	Substance
3 – 7	4,4'-Methylenediphenyldiisocyanate, oligomers, CAS: 25686-28-6 LC50, (96h), fish: > 1000 mg/l (OECD 203) EC50, (24h), Daphnia magna: > 1000 mg/l (OECD 202) EC50, Bacteria: > 100 mg/l/3h (OECD 209) EC50, (72h), Algae: >1640 mg/l (OECD 201) NOEC, (21d), Daphnia magna: > 10 mg/l (OECD 211)
13 – 30	4,4'-methylenediphenyl diisocyanate, CAS: 101-68-8 LC50, (96h), Danio rerio: > 1000 mg/l (OECD 203) EC50, (3h), Bacteria: > 100 mg/l (OECD 209)

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EC50, (24h), Daphnia magna: > 1000 mg/l (OECD 202)
 NOEC, (21d), Daphnia magna: > 10 mg/l (OECD 202)
 ErCSO, (72h), Scenedesmus subspicatus: >1640 mg/l (OECD 201)

Persistence and degradability

Behaviour in environment compartments	:	not determined
Behaviour in sewage plant	:	not determined
Biological degradability	:	the product is not readily biodegradable
Bioaccumulative potential	:	log Pow: 4,51 (CAS 101-68-8) BCF: 200 (CAS 101-68-8)
Mobility in soil	:	No information available
Results of PBT and vPvB assessment	:	Based on all available information not to be Classified as PBT or vPvB
Other Adverse effects	:	The product is insoluble in water Ecological data of complete product are not available The toxicity data pertaining to the ingredients were supplied by the manufacturer of raw materials

13. DISPOSAL CONSIDERATIONS:

Disposal must be in accordance with local and national legislation.

Disposal	:	Waste material must be disposed of in accordance with the national and local regulations. Uncontaminated packaging maybe taken for recycling Packaging that cannot be cleaned should be disposed of as for product
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14. TRANSPORT INFORMATION:

UN proper shipping name

Transport by land according to ADR/RID	:	NO DANGEROUS GOODS
Inland navigation (AND)	:	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	:	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	:	NOT CLASSIFIED AS "DANGEROUS GOODS"

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15. REGULATORY INFORMATION:

EEC – REGULATIONS	:	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC
TRANSPORT REGULATIONS	:	DOT – classification, ADR (2013); IMDG-Code (2013, 36. Arndt); IATA-DGR (2013)
NATIONAL REGULATIONS (GB)	:	EH40/2005 Workplace exposure limits (second edition, Published December 2011 CHIP 3 / CHIP 4

16. OTHER INFORMATION:

The data and advice given apply when the product is used for the stated application or applications. The product is not sold as suitable for any other applications. Use of the product for applications other than as stated in the sheet may give rise to risks not mentioned in this sheet. The product should not be used other than for the stated application or applications without seeking advice from MATEX.

If the product has been purchased for supply to a third party for use at work, it is the purchaser's duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet.

It is the responsibility and duty of the employer to inform employees and others who may be affected of hazards described in this sheet and of any precautions which should be taken.

This sheet does not constitute or substitute for the users own assessment of workplace risk, as required by other health and safety legislation.

Further copies of this Safety Data Sheet may be obtained from MATEX.

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NON HAZARDOUS – CHEMICAL IDENTIFICATION CODE NOT APPLICABLE

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

Product Name	:	HYDROTHANE HP, part B
HS Code	:	32149090
Application	:	Two Component, Solvent Free Spray Applied Pure Polyurea Coating
Manufacturer	:	MATEX CONSTRUCTION CHEMICALS MANUFACTURING CO. L.L.C.
Address	:	P.O. Box 29585
Telephone	:	+971 4 3334140
Fax	:	+971 4 3334115
Email	:	info@matex.ae
Website	:	www.matex-global.com

2. HAZARDS IDENTIFICATION:

Classification of the substance or mixture

According to (EC) No 1272/2008 (CLP)

Skin Corr. 1B: H314 Causes severe skin burns and eye damage
 STOT RE 2: H373 may cause damage to organs through prolonged or repeated exposure if swallowed
 Acute Tox. 4: H302 Harmful if swallowed
 Aquatic Chronic 1: H410 Very toxic to aquatic life with long lasting effects

According to Regulation 67/548/EEC or 1999/45/EC

Xn, Harmful – R21/22: Harmful in contact with skin and if swallowed
 C, Corrosive – R34: Causes burns
 Xn, Harmful – R48/22: Harmful – danger of serious damage to health by prolonged exposure if swallowed
 N, Dangerous for the environment – R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Labelling according to Regulation (EC) 1272/2008

Hazard Pictograms



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Signal Word	Danger
Contains	Polyoxypropylenediamine Diethylmethylbenzendiamine
Hazard Statements	H314 Causes severe skin burns and eye damage H373 May cause damage to organs through prolonged or repeated Exposure if swallowed H302 Harmful if swallowed H410 Very toxic to aquatic life with long lasting effects
Precautionary Statements	P260 Do not breathe vapours/spray P280 Wear protective gloves/protective clothing/eye protection/face Protection P301+P330+P331 IF SWALLOWED: rinse mouth. DO NOT induce vomiting P303+P361+P353 IF ON SKIN (or hair): Take off immediately all Contaminated clothing. Rinse skin with water/shower P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes Remove contact lenses. If present and easy to do. Continue rinsing P310 Immediately call a POISON CENTER/doctor P501 Dispose of contents/container to in accordance with local/regional/ National/international regulations
Other Hazards	Further hazards were not determined with the current level of knowledge

3. COMPOSITION / INFORMATION ON INGREDIENTS:

The product is a mixture.

Range (%)	Substance
60 – 80	Polyoxypropylenediamine CAS: 9046-10-0 GHS/CLP: Acute Tox. 4: H302 – Skin Corr. 1 B: H314 – Eye Dam. 1: H318 Aquatic Chronic 3: H412 ECC: C, R22 – 34 – 52/53
15 – 25	Diethylmethylbenzenediamine CAS: 68479-98-1, EINECS/ELINCS: 270-877-4, EU-INDEX: 612-130-00-0 ECB-Nr.: 01-2119486805-25-XXXX GHS/CLP: Acute Tox. 4: H302 H312 – STOT RE 2: H373 – Eye Irrit. 2: H319 – Auqatic Acute 1: H400 – Aquatic Chronic 1: H410, M = 1 EEC: Xn-N, R 21/22-36-48/22-50/53

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Comment on component parts Substances of very high concern – SVHC: substances are not contained or are below 0.1%. For full test of H-statement and R-phrases: see SECTION 16

4. FIRST AID MEASURES:

General Info	:	Take off contaminated clothing and wash before reuse
Eyes	:	Irrigate immediately with copious quantities of water for several minutes. Obtain medical attention urgently if symptoms persist.
Skin	:	Wash off immediately with soap and water. Immediate medical treatment necessary as untreated burns can result in slow-healing wounds.
Inhalation	:	Remove from exposure, rest and keep him calm. If Symptoms persist seek medical treatment
Ingestion	:	Wash out mouth with water. DO NOT induce vomiting. Obtain medical attention
Most important symptoms and effects (both acute and delayed)		
	:	Product is caustic, redness
Indication of any immediate medical attention and special treatment needed		
	:	Treat symptomatically
	:	Keep under medical supervision for at least 48 hours

5. FIRE FIGHTING MEASURES:

Suitable Extinguishing Media	:	Foam, dry powder, water spray jet, carbon dioxide
Extinguishing media that must not Be used	:	Full water jet
Specific Hazards	:	Oxides of carbon and nitrogen may be emitted. Unknown risk of formation of toxic pyrolysis products
Special Protective Precaution and Equipment		
	:	Fire fighters to wear self-contained breathing apparatus and suitable protective clothing
	:	Do not inhale explosion and /or combustion gases
	:	Fire residues and contaminated firefighting water must be disposed of in accordance with local regulations

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6. ACCIDENTAL RELEASE MEASURES:

Personal Precautions	:	Ensure adequate ventilation
	:	Use personal protective equipment
	:	Remove persons to safety
Environmental Precautions After spillage/leakage	:	Prevent entry into drains, sewers and water courses.
	:	Prevent spread over a wide area (e.g by containment or oil barriers
	:	In case of product spills into drains/surface waters/ groundwater, immediately inform the authorities
	:	Pickup with absorbent material (e.g sand, universal absorbent, diatomaceous earth)
	:	Dispose of absorbed material in accordance with the regulations

7. HANDLING AND STORAGE:

Precautions for safe handling	:	Ensure adequate ventilation
	:	Use personal protective equipment
	:	Remove persons to safety
		Do not eat, drink, smoke or take drugs at work
		Take off contaminated clothing and wash before reuse
		Wash hands before breaks and after work
		Use barrier skin cream
Conditions for safe storage, including any incompatibilities	:	Prevent penetration into the ground
	:	Keep only in original container
		Do not store together with oxidizing agents
		Keep container tightly closed
		Keep container in a well-ventilated place
		Keep in a cool place. Store in a dry place
		Protect from heat/overheating and from sun
		Protect from light

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

Control Parameters
Ingredients with occupational exposure limits to be monitored (GB): not applicable

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DNEL

Range (%)
15 – 25

Substance

Diethylmethylbenzenediamine, CAS: 68479-98-1

Industrial, dermal, long-term – systemic effects: 1 mg/kg bw/day

Industrial, inhalative, long-term systemic effects: 0.13 mg/m³

General population, oral, long-term – systemic effects: 0.1 mg/kg bw/day

General population, dermal, long-term – systemic effects: 1 mg/kg bw/day

General population, inhalative, long-term-systemic effects: 0.1 mg/m³

PNEC

Range (%)
15 – 25

Substance

Diethylmethylbenzenediamine, CAS: 68479-98-1

Oral (food), 2 mg/kg

Soil, 5,6 ug/kg

Sediment (seawater), 0.0029 mg/kg

Sediment (freshwater), 0.029 mg/kg

Seawater, 0.00005 mg/l

Freshwater, 0.0005 mg/l

Sewage treatment plants (STP), 17 mg/l

Exposure controls

Additional advice on system design

Ensure adequate ventilation on work station

Using suitable discharge or exhausts ventilation

Eye protection

Tightly fitting goggles

Hand protection

The details concerned are recommendations. Please contact the glove supplier for further information

In full contact:

Butyl rubber, >480 min (EN 374)

Nitrile rubber, >480 min (EN 374)

Skin Protection

Impermeable protective clothing

Other

Avoid contact with eyes and skin

Do not breathe vapour/spray

Personal protective equipment should be selected specifically for the Working place, depending on concentration and quantity of the Hazardous substances handled. The resistance of this equipment/s To chemicals should be ascertained with the respective supplier

Respiratory protection

If ventilation insufficient, ear respiratory protection

Short term: filter apparatus, filter A

Thermal hazards

Not applicable

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Delimitation and monitoring

Of the environmental exposition Protect the environment by applying appropriate control to prevent
Or limit emissions

9. PHYSICAL AND CHEMICAL PROPERTIES:

Form	:	Viscous liquid
Colour	:	Various
Odour	:	amine-like
Odour threshold	:	not determined
pH value	:	not applicable
pH value (1%)	:	not applicable
Boiling point (°C)	:	not determined
Flash point (°C)	:	not determined
Flammability (°C)	:	not applicable
Lower explosion limit	:	not determined
Upper explosion limit	:	not determined
Oxidizing properties	:	no
Vapour pressure/gas pressure (kPa)	:	not determined
Density (g/ml)	:	0.98 – 1.02 (20°C)
Bulk Density (kg/m ³)	:	not applicable
Solubility in water	:	immiscible
Partition coefficient (n-octanol/water)	:	not determined
Viscosity	:	400 – 800 mPas (25°C)
Relative vapour density determined in air	:	not determined
Evaporation speed	:	not determined
Melting point (°C)	:	not determined
Autoignition temperature (°C)	:	not determined
Decomposition temperature (°C)	:	not determined

10. STABILITY AND REACTIVITY:

Reactivity	:	no dangerous reactions known if used as directed
Chemical stability	:	Stable under normal ambient conditions (ambient Temperature).
Possibility of hazardous reactions	:	Reactions with strong oxidizing agents

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Conditions to avoid	:	Strong heating
Hazardous Decomposition Products	:	In the event of fire: see SECTION 5

11. TOXICOLOGICAL INFORMATION:

Information of toxicological effects

Acute toxicity

	Product
	ATE-mix, dermal, >2000 mg/kg
	ATE-mix, oral, > 300 - <2000 mg/kg
Range (%)	Substance
60 - 80	Polyoxypropylenediamine, CAS: 9046-10-0
	LD50, oral, Rat: 475 mg/kg
	LD50, dermal, Rabbit: 2090 mg/kg
	NOAEL, dermal, 40 mg/kg/d (subchronic)
	NOAEL, dermal, 1000 mg/kg/d (subacute)
	NOAEL, inhalative, 790 ppm (subacute)
15 – 25	Diethylmethylbenzenedimine, CAS: 68479-98-1
	LD50, dermal, Rat: > 2000 mg/kg (OECD 402)
	LD50, oral, Rat: 738 mg/kg (OECD 401)
	NOAEL, oral, Rat: > = 8 mg/kg/90d
	NOAEL, dermal, Rabbit: > = 10 mg/kg/21d
	NOAEL, oral, Rat: > = 21 mg/kg/90d
	NOEL, oral, Rat: 50 ppm/28d
	NOEL, dermal, Rabbit: 1.0 mg/kg/21d
Serious eye damage/irritation	: Product is caustic
Skin corrosion/irritation	: Product is caustic
Respiratory or skin sensitisation	: not determined
Specific target organ toxicity	
single exposure	: not determined
Specific target organ toxicity	
repeated exposure	: STOT RE 2
Mutagenicity	: OECD 471 (in vitro), Ames-test: positive
	OECD 473, Negative chromosomal aberration test (in vitro)
	OECD 474, Micronucleus test, negative (in vitro) (CAS 68479-98-1)

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Reproduction toxicity	:	not determined
Carcinogenity	:	not determined
General remarks	:	May cause irritation of respiratory organs in general: utmost caution! Release of hydrocyanic acid is possible – blockade of cellular respiration. Cardiovascular disorders, dyspnea, unconsciousness

Toxicological data of complete product are not available
The toxicity data listed pertaining to the ingredients are
intended for those working in the medical professions,
experts for occupational health and safety and
toxicologists. The toxicity data pertaining to the
ingredients were supplied by the manufacturers of raw
materials. The product was classified on the basis of the
calculation procedure of the preparation directive.

12. ECOLOGICAL INFORMATION:

Toxicity

Range (%)	Substance
60 – 80	Polyoxypropylenediamine, CAS: 9046-10-0 LD50, (96h), fish: > 100 mg/l ED50, (48h), Daphnia magna: 15 mg/l IC50, (72h), Algae: 135 mg/l NOEC, (21d), Daphnia magna: > 10 mg/l (OECD 211)
15 – 25	Diethylmethylbenzenediamine, CAS: 68479-98-1 LC50, (96h), Pimephales promelas: > 106 mg/l (OECD 203) EC50, (24h), Pseudomonas putida: > 170 mg/l (DIN 38412-8) EC50, (48h), Daphnia magna: 5.8 mg/l (OECD 202) ErC50, (72h), Desmodemus subspicatus: ca. 104 mg/l (OECD 201)

Persistence and degradability

Behaviour in environment compartments	:	not determined
Behaviour in sewage plant	:	not determined
Biological degradability	:	the product is not readily biodegradable
Bioaccumulative potential	:	BCF: 2.75 (CAS 68479-98-1) logPow: 1.38 (20°C) (CAS 68479-98-1)
Mobility in soil	:	No information available
Results of PBT and vPvB assessment	:	Not applicable
Other Adverse effects	:	The product is insoluble in water Ecological data of complete product are not available

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The product was classified on the basis of the calculation procedure of the preparation directive

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials

13. DISPOSAL CONSIDERATIONS:

Disposal must be in accordance with local and national legislation.

Disposal : Waste material must be disposed of in accordance with the national and local regulations. Uncontaminated packaging maybe taken for recycling
Packaging that cannot be cleaned should be disposed of as for product

14. TRANSPORT INFORMATION:

UN proper shipping name

Transport by land according to ADR/RID :

UN 2735 Amines, liquid corrosive, n.o.s

(Polyoxypropylenediamine, Diethylmethylbenzenediamine) (ENVIRONMENTALLY HAZARDOUS) 8 III

- Classification code
- Label

C7



- ADR LQ
- ADR 1.1.3.6 (8.6)

5 I

Transport category (funnel restriction code) 3 €

Inland navigation (AND)

:

UN 2735 Amines, liquid, corrosive, n.o.s

(Polyoxypropylenediamine, Diethylmethylbenzenediamine) (ENVIRONMENTALLY HAZARDOUS) 8 III

- Classification code
- Label

C7



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Marine transport in accordance with
IMDG : UN 2735 Amines, liquid, corrosive, n.o.s
(Polyoxypropylenediamine,
Diethylmethylbenzenediamine) 8 III MARINE
POLLUTANT
F-A, S-B

- EMS
- Label



- IMDG LQ 5 I

Air transport in accordance with IATA : UN 2735 Amines, liquid corrosive, n.o.s
(Polyoxypropylenediamine,
Diethylmethylbenzenediamine) 8 III

- Label



15. REGULATORY INFORMATION:

EEC – REGULATIONS : 1967/548 (1999/45); 1991/689 (2001/118); 1999/13;
2004/42; 648/2004; 1907/2006 (Reach); 1272/2008;
75/324/EEC (2008/47/EC); 453/2010/EC

TRANSPORT REGULATIONS : DOT – classification, ADR (2013); IMDG-Code (2013, 36.
Arndt); IATA-DGR (2013)

NATIONAL REGULATIONS (GB) : EH40/2005 Workplace exposure limits (second edition,
Published December 2011 CHIP 3 / CHIP 4

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16. OTHER INFORMATION:

The data and advice given apply when the product is used for the stated application or applications. The product is not sold as suitable for any other applications. Use of the product for applications other than as stated in the sheet may give rise to risks not mentioned in this sheet. The product should not be used other than for the stated application or applications without seeking advice from MATEX.

If the product has been purchased for supply to a third party for use at work, it is the purchaser's duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet.

It is the responsibility and duty of the employer to inform employees and others who may be affected of hazards described in this sheet and of any precautions which should be taken.

This sheet does not constitute or substitute for the users own assessment of workplace risk, as required by other health and safety legislation.

Further copies of this Safety Data Sheet may be obtained from MATEX.