



Material Safety Data Sheet

NON HAZARDOUS – CHEMICAL IDENTIFICATION CODE NOT APPLICABLE

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

Product Name	:	ARMOFLOOR PU150 – PART A
HS CODE	:	32089000
Application	:	Polyurethane Floor 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:

Symbol(s)	:	Xn
Risk Phrase(s)	:	R10 Flammable
	:	R20/21/22 Harmful by inhalation, contact with skin and if swallowed
	:	R36/38 Irritating to skin and eyes
	:	R65 Harmful: May cause lung damage if swallowed
	:	R66 Repeated exposure may cause skin dryness and cracking
	:	R67 Vapors may cause drowsiness or dizziness
Safety Phrase(s)	:	S2 Keep out of reach of children
	:	S9 Keep container in well ventilated place
	:	S16 Keep away from sources of ignition, No smoking.
	:	S33 Take precautionary measures against static discharges.
	:	S23 Do not breathe in vapors
	:	S24/25 Avoid contact with skin and eyes.
	:	S29 Do not empty into drains
	:	S36/37/39 Wear suitable clothing, gloves, eye and face protection
	:	S45 In case of accident or if you feel unwell seek medical advice immediately (show product label whenever possible)
	:	S62 If swallowed do not induce vomiting, seek medical advice immediately and show this container or label

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3. COMPOSITION / INFORMATION ON INGREDIENTS:

INGREDIENTS:		
Name	% Composition	CAS No.
Branched Polyol	30-50	9003-13-8
Inorganic Filler	30-50	14808-60-7
Aromatic Hydrocarbon Solvent	10-20	64742-95-6
Titanium Dioxide	5-7	13463-67-7

4. FIRST AID MEASURES:

General Advice	:	First aid personnel should pay attention to their own safety. Remove contaminated clothing.
Skin contact	:	Flush with large amounts of clean water, use soap if available. Remove any contaminated clothing.
Eye contact	:	Check for and remove any contact lenses. Flush with large amounts of clean warm water for 15 minutes. Get prompt medical attention.
Inhalation	:	Immediately move victim to fresh air. If breathing has stopped then administer artificial respiration. Get prompt medical attention.
Ingestion	:	Guard against aspiration into lungs. If victim is conscious and alert, give to glasses of water. Get prompt medical attention.
Note to Physician		
Treatment	:	Treat according to symptoms (decontamination, vital functions), no known specific antidotes.

5. FIRE FIGHTING MEASURES:

Suitable Extinguishing Media	:	Foam, water spray, dry extinguishing media, carbon dioxide.
Unsuitable Extinguishing Media:		Water jet.
Specific Hazards	:	Carbon dioxide, carbon monoxide, harmful vapors, nitrogen oxides, fumes / smoke, carbon black
Special Protective Equipment	:	Appropriate-breathing apparatus may be required
Additional information	:	Cool endangered containers with water in case of fire. Do not allow the quenching water into the sewage system.



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6. ACCIDENTAL RELEASE MEASURES:

Personal Precautions	:	Use personal protective clothing. Do not breathe vapor/aerosol/spray mists. Sources of ignition should be kept well clear. Handle in accordance with good building materials hygiene and safety practice.
Environmental Precautions	:	Prevent entry into drains, sewers and water courses.
Methods for Cleaning up or Taking UP	:	Shut off all ignition sources or flames in hazard area. Contain the spill with sand or earth. Place used absorbent in suitable sealed containers and follow state or local authority regulations and guidelines for disposal of the waste. Clean area with detergent and water.

7. HANDLING AND STORAGE:

Handling	:	Flammable liquid. Vapor may form explosive mixtures with air. Avoid heat and all ignition sources. Use only in well ventilated areas. Flameproof equipment is necessary in any area where product is being used. Product transfer and storage equipment must be earthed. Prevent build-up of flammable vapors. Handle in accordance with state or territory regulations of flammable liquids. Take precautionary measures against static electricity. Store in original packages as approved by manufacturer.
Storage	:	Keep container tightly closed. Store product between 15-35°C, in a dry environment and out of direct sunlight. Do not allow product to freeze. Store away from sources of heat and ignition. Store in original containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS:

Protective clothing to be worn	:	Always wear eye protection, protect hands under rubber gloves, wear protective footwear.
Engineering Controls	:	Where mists or vapors are generated exhaust ventilation should be provided to maintain airborne concentration levels to a level as low as reasonably practicable.
Ventilation	:	Adequate, local ventilation must be provided for all enclosed work spaces.

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Spill Procedures : Contain and absorb spilled materials with a non-flammable substance such as sand.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Form	:	Liquid
Colour	:	Various (see the color chart)
Odour	:	Faint
Change in physical state	:	N/A
Boiling point, °C (mm Hg)	:	N/A
Melting point, °C	:	
Boiling Point (°C)	:	> 150°C
Auto-ignition temperature (°C)	:	N/A
Explosion limits	:	N/A
-lower		
-upper		
Thermal decomposition	:	N/A
Specific gravity (°C)	:	1.3 (25)
Viscosity (mPa.s)	:	750
Vapour pressure, mbar	:	no data available
pH value (°C)	:	N/A
Solubility in water (°C)	:	N/A

10. STABILITY AND REACTIVITY:

Chemical stability	:	Stable when stored and used as directed
Conditions	:	Heat, flames, ignition sources and incompatibles
Incompatible materials	:	Not to be loaded with strong alkalis, oxidizing agents, acids, nitrates.
Hazardous decomposition	:	
Products	:	Oxides of carbon when heated to decomposition
Hazardous reactions	:	No information available.

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11. TOXICOLOGICAL INFORMATION:

Health Effects from the Likely Routes of Exposure:

Acute	:	Not established for this product.
Eyes	:	May cause irritation to the eyes with effects including tearing, pain, stinging and blurred vision.
Skin	:	Harmful by contact with skin. Effects including redness, itchiness, drying and defatting.
Ingestion	:	Harmful to mouth, throat and stomach. There is some probability that this product could be aspirated into the lungs and hence, if vomiting occurs, this may lead to chemical pneumonitis which can be fatal.
Inhalation	:	Harmful by inhalation, may cause irritation to the nervous system depression. May cause irritation to the nose, throat and respiratory system with effects including dizziness, headache, staggering gait, nausea and if the concentration of vapours is high enough and unconsciousness.

12. ECOLOGICAL INFORMATION:

Ecotoxicity	:	Avoid contaminating waterways. It could be toxic to the biomass in a treatment plant and could be toxic to fish. Keep out of surface waters, sewers and waterways entering or leading to surface waters. Notify authorities if any exposure to the general public or environment occurs or is likely to occur. No specific data is available.
Degradation and persistence	:	All solvents are biodegradable and oxidize by photo-chemical reactions with air.
Persistence and biodegradability	:	Not established for this product

13. DISPOSAL CONSIDERATIONS:

Disposal methods and containers	:	Follow state or local authority regulations and guidelines for disposal of the waste. Clean area with detergent and water. Do not allow product to enter drains, sewers or water courses. – inform the local authorities if this occurs.
Special precautions for landfill and incineration	:	Not established for this product.

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14. TRANSPORT INFORMATION:

Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.

15. REGULATORY INFORMATION:

Symbol(s)	:	Xn
Risk Phrase(s)	:	R10 Flammable
	:	R20/21/22; Harmful by inhalation, contact with skin and if swallowed
	:	R36/38 Irritating to skin and eyes
	:	R65 Harmful: May cause lung damage if swallowed
Safety Phrase(s)	:	R66 Repeated exposure may cause skin dryness and cracking
	:	R67 Vapours may cause drowsiness or dizziness
	:	S2 Keep out of reach of children
	:	S9 Keep container in well ventilated place
	:	S16 Keep away from sources of ignition, No smoking.
	:	S33 Take precautionary measures against static discharges.
	:	S23 Do not breathe in vapours
	:	S24/25 Avoid contact with skin and eyes.
	:	S29 Do not empty into drains
	:	S36/37/39 Wear suitable clothing, gloves, eye and face protection
	:	S45 In case of accident or if you feel unwell seek medical advice immediately (show product label whenever possible)
	:	S62 If swallowed do not induce vomiting, seek medical advice immediately and show this container or label



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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.



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NON HAZARDOUS – CHEMICAL IDENTIFICATION CODE NOT APPLICABLE

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

Product Name	:	ARMOFLOOR PU150 – PART B
HS CODE	:	29291000
Application	:	Polyurethane Floor Coating MATEX
Manufacturer	:	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:

Hazard Symbol(s)	:	Xn, Harmful
Risk Phrase(s)	:	R42/43 May cause sensitization by inhalation and skin contact
	:	R20 Harmful by inhalation
	:	R36/37/38 Irritating to eyes, respiratory system and skin
S-phrases(s)	:	S2 Keep out of reach of children
	:	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	:	S35 This material and its container must be disposed of in a safe way.
	:	S36/37 Wear suitable protective clothing and gloves
	:	S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
	:	S46 If swallowed, seek medical advice immediately and show this container or label.
	:	S51 Use only in well-ventilated areas
	:	S63 In case of accident by inhalation: remove casualty to fresh air and keep at rest.



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3. COMPOSITION / INFORMATION ON INGREDIENTS:

INGREDIENTS:		
Name	% Composition	CAS No.
4,4' – diphenylmethanediisocyanate	100	9016-87-9

4. FIRST AID MEASURES:

General Advice	:	First aid personnel should pay attention to their own safety. Remove contaminated clothing.
Skin contact	:	Flush with large amounts of clean water, use soap if available. Remove any contaminated clothing.
Eye contact	:	Check for and remove any contact lenses. Flush with large amounts of clean warm water for 15 minutes. Get prompt medical attention.
Inhalation	:	Immediately move victim to fresh air. If breathing has stopped then administer artificial respiration. Get prompt medical attention.
Ingestion	:	Guard against aspiration into lungs. If victim is conscious and alert, give glasses of water. Get prompt medical attention.
Note to Physician	:	
Treatment	:	Treat according to symptoms (decontamination, vital functions), no known specific antidotes.

5. FIRE FIGHTING MEASURES:

Suitable Extinguishing Media	:	Foam, water spray, dry extinguishing media, carbon dioxide.
Unsuitable Extinguishing Media:		Water jet.
Specific Hazards	:	Carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes / smoke, carbon black
Special Protective Equipment	:	Appropriate-breathing apparatus may be required
Additional information	:	Cool endangered containers with water in case of fire. Do not allow the quenching water into the sewage system.



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6. ACCIDENTAL RELEASE MEASURES:

Personal Precautions	:	Use personal protective clothing. Do not breathe vapour/aerosol/spray mists. Sources of ignition should be kept well clear. Handle in accordance with good building materials hygiene and safety practice.
Environmental Precautions	:	Prevent entry into drains, sewers and water courses.
Methods for Cleaning up or Taking UP	:	For small amounts – Pick up the inert absorbent material like sand, earth, etc. Dispose of contaminated material as prescribed. For large amounts – Pump off products.

7. HANDLING AND STORAGE:

Handling	:	Avoid aerosol formation. Avoid inhalation of mists / vapours. Avoid skin contact. No special measures necessary provided product is used correctly.
Storage	:	Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Store protected against freezing and against direct sunlight. Protect from temperatures below 5°C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS:

NOHSC 1003 (1995)		
Exposure Standard	:	Isocyanate 0.02 mg/m ³ TWA, 0.07 mg/m ³ STEL (as NCO)
Engineering Control Measures	:	Use with adequate general and local exhaust ventilation
Equipment	:	Personal Protective Impervious gloves, safety goggles, plastic apron

9. PHYSICAL AND CHEMICAL PROPERTIES:

Form	:	Liquid
Colour	:	Yellowish
Odour	:	Earthy
Change in physical state	:	N/A

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Boiling point, °C (mm Hg)	:	N/A
Melting point, °C	:	< 0°C
Boiling Point (°C)	:	N/A
Flash Point (°C)	:	> 200°C
Autoignition temperature (°C)	:	> 400°C
Thermal decomposition	:	N/A
Specific gravity (°C)	:	1.4 (25)
Viscosity (mPa.s)	:	200-500
Vapour pressure (50°C)	:	< 0,0001 hPa
pH value (°C)	:	N/A
Solubility in water (°C)	:	N/A

10. STABILITY AND REACTIVITY:

Conditions to Avoid	:	Stable under recommended storage and handling conditions
Materials to Avoid	:	Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Exothermic reactions with amines and alcohols. In contact with water (moisture) CO ₂ is formed which leads to an excess pressure in closed containers.
Hazardous Decomposition Products	:	When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION:

Experience on Practice	:	Based on the properties of the isocyanate components and considering toxicological data on similar preparations, this preparation may cause acute irritation and / or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL (Occupational Exposure Limit). Repeated exposure may lead to permanent respiratory disability. Delayed reactions possible (breathing problems, coughs, asthma).
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Additional Toxicological Information : The product was classified in toxicological terms on the basis of the results of the calculation procedure outlined within General Directive on Preparations (88/379/EEC).

12. ECOLOGICAL INFORMATION:

Ecotoxicity Assessment of Aquatic Toxicity : There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on Methylenediphenyl Diisocyanate Assessment of Aquatic Toxicity : There is a high probability that the product is not acutely harmful to aquatic organisms. No toxic effects occur within the range of solubility. The inhibition of degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to Fish : LC0 (96h) > 1,000 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 84/449/EEC, C.1, static) Nominal concentration.

Aquatic Invertebrates : EC0 (24h) > 1,000 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Aquatic Plants : No observed effect concentration (72h) > 1,640 mg/l, scenedesmus subspicatus (OECD Guideline 201)

Microorganisms / Effect On Activated Sludge : EC50 > 100 mg/l, activated sludge (OECD Guideline 209, aquatic)

13. DISPOSAL CONSIDERATIONS:

Observe national and local legal requirements. Residues should be disposed of in the same manner as the substance / product.

Contaminated Packaging : Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.



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14. TRANSPORT INFORMATION:

Domestic Transport	:	Not classified as a dangerous good under transport regulations.
Sea Transport IMDG	:	Not classified as dangerous good under transport regulations.
Air Transport IATA / CAO	:	Not classified as dangerous good under transport regulations.

15. REGULATORY INFORMATION:

EEC Directives:

Hazard Symbol(s)	:	Xn, harmful
R-phrases(s)	:	R42/43, May cause sensitization by inhalation and skin contact
	:	R20, Harmful by inhalation
	:	R36/37/38, Irritating to eyes, respiratory system and skin
S-phrases(s)	:	S2, Keep out of reach of children
	:	S26, In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	:	S35, This material and its container must be disposed of in a safe way.
	:	S36/37, Wear suitable protective clothing and gloves
	:	S45, In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
	:	S46, If swallowed, seek medical advice immediately and show this container or label.
	:	S51, Use only in well-ventilated areas
	:	S63, In case of accident by inhalation: remove casualty to fresh air and keep at rest.
	:	S64, If swallowed, rise mouth with water (only if the person is conscious).

Contains isocyanates. Observe manufacturer's instructions.

Hazard Determining Components For Labeling	:	Diphenylmethane – 4, 4' – Diisocyanate (MDI), Methylenediphenyldiisocyanate, Poly-functional isocyanate
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