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 SP250 PART A
HS CODE	:	**32089090**
Application	:	High Performance, UV Resistant Rapid Curing Polyaspartic 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:

GHS Classification

Skin sensitisation : Category 1

GHS Label Elements :

Signal Word : Warning

Hazard statements : May cause an allergic reaction

Precautionary Statements :

Prevention

Wear protective gloves

Avoid breathing dust, mist, gas, vapors or spray

Contaminated work clothing must not be allowed out of the workplace

Response

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical attention

Wash contaminated clothing before reuse

Disposal

Dispose of contents and container in accordance with existing federal state and local environmental control laws

Material Safety Data Sheet

3. COMPOSITION / INFORMATION ON INGREDIENTS:

INGREDIENTS:		
Name	**% Composition**	**CAS No.**
Aspatic Ester	60-70	136210-30-5
Filler	25-35	7727-43-7
Additive	1-5	proprietary

4. FIRST AID MEASURES:

General Advice : First aid personnel should pay attention to their own safety. Remove contaminated clothing.

Most Important Symptom(s) Effect (s) : Acute: may cause allergic skin reaction with symptoms of reddening, itching, swelling and rash. May cause skin irritation with symptoms of reddening, itching and swelling. May cause eye irritation with symptoms of reddening, tearing, stinging and swelling. May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose.

Skin contact : Flush with large amounts of clean water, use soap if available. Remove any contaminated clothing. Get medical attention if Irritation develops.

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.

5. FIRE FIGHTING MEASURES:

Suitable Extinguishing Media : Foam, water spray, dry extinguishing media, carbon dioxide.

Unsuitable Extinguishing Media: No data available

Specific Hazards	:	Carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes / smoke, carbon black
Special Protective Equipment	:	Appropriate-breathing apparatus may be required
Fire fighting procedure	:	Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize the risk of rupture.
Additional information	:	Cool endangered containers with water in case of fire. Do not allow the quenching water into the sewage system.

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.
Substances to avoid	:	Oxidizing agents, acids, isocyanates

8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS:

Industrial Hygiene/Ventilation Measures

General dilution and local exhaust ventilation as necessary to control airborne vapors, aerosols (e.g dusts, mists) and thermal decomposition products. Heating may result in generation of airborne vapors and/or aerosols

Respiratory Protection

If vapors form, respiratory protection is recommended. The use of a positive pressure supplied air respirator is recommended if the airborne concentration is unknown or if spraying is performed in a confined space or area with limited ventilation. In spray application an organic vapor/particulate respirator or air supplied unit is necessary.

Hand Protection

Ensure gloves remain in good condition during use and replace if any deterioration is observed

Eye Protection

Chemical safety goggles or safety glasses with side shields. Chemical safety goggles in combination with a full-face shield if a splash hazard exists

Skin Protection

Avoid all skin contact. Depending on the conditions of use, cover as much of the exposed skin area as Possible with appropriate clothing to prevent skin contact. Where spray mist/vapor is anticipated, permeation resistant clothing s recommended.

Additional protective measures

Employees should wash their hands and face before eating, drinking or using tobacco products. Educate and train employees in the safe use and handling of the product. Emergency showers and eyewash station should be available.

---

9. PHYSICAL AND CHEMICAL PROPERTIES:

Form	:	Liquid
Colour	:	Yellowish
Odour	:	Earthy
Change in physical state	:	N/A
Boiling point, °C (mm Hg)	:	N/A
Melting point, °C	:	Not determine
Boiling Point (°C)	:	N/A
Flash Point (°C)	:	Not determine
Autoignition temperature (°C)	:	Not determine
Thermal decomposition	:	N/A
Density	:	1.5
Viscosity (mPa.s)	:	3000 - 5000
Vapour pressure (50°C)	:	N/A
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, isocyanates materials
Conditions to avoid	:	Avoid extreme heat
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:

Likely routes of exposure	:	Skin contact, eye contact, inhalation, ingestion
Health Effects ad Symptoms	:	Acute: may cause allergic skin reaction with symptoms of reddening, itching, swelling and rash. May cause skin irritation with symptoms of reddening, itching, and swelling. May cause eye irritation with symptoms of reddening, tearing, stinging and swelling. May cause respiratory tract irritation with symptoms of coughing, sore throat and runny nose. Chronic: Not expected to cause adverse chronic health effects
Toxicity Data for Aspartic Ester	:	Toxicity note Toxicity data is based on a similar product
Acute oral toxicity	:	LD50: >2,000 mg/kg (rat) Directive 67/548/EEC, Annex V, B.1.) Studies of a comparable product
Acute Inhalation Toxicity	:	LC50: >4.224 mg/l, 4 h, dust/mist (rat, male/female) (OECD Test Guideline 403) Toxicological studies of a comparable product
Acute Dermal Toxicity	:	LD50: >2,000 mg/kg (rat) Directive 67/548/EEC, Annex V, B.3) Studies of a comparable product
Skin Irritation	:	OECD Test Guideline 404, slight irritation
Eye Irritation	:	Rabbit, OECD Test Guideline 405, slightly irritating Toxicological studies of a comparable product Rat: effect on the respiratory tract: slight irritant
Sensitization	:	Skin sensitisation according to Magnusson/Kligmann (maximizing test): positive (guinea pig, OEC Guideline 406) Toxicological studies of a comparable product

Repeated Dose Toxicity	**:**	Subacute oral toxicity: NOAEL: >1,000 mg/kg, (rat, Male/female Toxicological studies of comparable product

12. ECOLOGICAL INFORMATION:

Ecological Data for Aspartic Ester

Biodegradation	**:**	13% exposure time: 28d, i.e not readily degradable Ecotoxicological reports on a comparable product
	:	0% exposure time: 28d, i.e not inherently degradable Ecotoxicological studies of the product
Bioaccumulation	:	value calculated, 1,872 BCF The substance hydrolyzes rapidly in water. An accumulation in Aquatic organisms is not to be expected
Acute and prolonged toxicity to fish :		LC50: 66mg/l (Danio rerio (zebra fish), 96h Ecotoxicological reports on a comparable product
Acute toxicity to aquatic invertebrates:		EC50: 88.6 mg/l (Daphnia magna (Water flea), 48 h Studies of a comparable product

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.

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:

USEPA CERCLA Hazardous Substances (40 CFR 302) components: none
SARA Section 311/312 Hazard Categories: refer to hazard classification information in section 2

USEPA Emergency Planning and Community Right-to-know act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, appendix A) components: none

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 of 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.

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 SP250 PART B
HS CODE	:	**32089090**
Application	:	High Performance, UV Resistant Rapid Curing Polyaspartic 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:

2.1 Classification of the substance or mixture

EC Regulation criteria 1272/2008 (CLP):

Classification of the Chemical: Not classified as hazardous

Carcinogenic 2
STOT SE3
STOT RE2
Rest. Sens 1

2.1 Label Elements:

Signal Word: Danger

Hazard statements:

H 315 Causes skin irritation
H 317 May cause allergic skin reaction
H 314 Cause serious eye irritation
H 332 Harmful if inhaled
H 334 Respiratory sensitization, breathing difficulties if inhaled
H 335 May cause respiratory irritation.
H 351 Suspected of causing cancer
H 373 May cause to organs through prolonged or repeated exposure

Precautionary statements:

P233 Keep container tightly closed
P280 Wear protective gloves / protective clothing / eye protection
P333+P313 If skin irritation or rash occurs, get medical attention
P501 Dispose of contents/ container in accordance with applicable regulations.

Special Provisions:

EUH204 Contains isocyanates. May produce an allergic reaction.

3. COMPOSITION / INFORMATION ON INGREDIENTS:

INGREDIENTS:				
Name	**% Composition**	**CAS No.**	**Classification**	**Specific Concentration Limits M- Factors**
Diphenylmethane diisocyanate	100	9016-87-9	Skin Irritant 2 H 315 Skin Sense 1 H 317 Eye Irritant 2 H 315 Acute Toxicity 4 H 332 Resp. Sense 1 H 334 STOT SE3 H 335 (not available) CARC 2 H 351 STOT RE 2 H 373 (not available)	Eye Irritant 2 : C≥5% STOT SE3 : C≥5% Skin Irritant 2 : C≥5% Resp. Sense 1 : C≥1%

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.

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.

Material Safety Data Sheet

8. EXPOSURE CONTROLS / PERSONAL PROTECTIONS:

NOHSC 1003 (1995)		
Exposure Standard	:	Isocyanate 0.02 mg/m3 TWA, 0.07 mg/m3 STEL (as NCO)
Engineering Control	:	Use with adequate general and local exhaust ventilation
Measures		Personal Protective
Equipment	:	Impervious gloves, safety goggles, plastic apron

9. PHYSICAL AND CHEMICAL PROPERTIES:

Form	:	Liquid
Colour	:	Yellowish
Odour	:	Earthy
Change in physical state	:	N/A
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) CO2 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.

Material Safety Data Sheet

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).
Additional Toxicological Information	:	The product was classified in toxicological terms on the basis of the results of the calculation procedure outlined within General

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 Methylenediphynel 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)

Material Safety Data Sheet

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.

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:

Hazard statements:

H 315 Causes skin irritation
H 317 May cause allergic skin reaction
H 314 Cause serious eye irritation
H 332 Harmful if inhaled
H 334 Respiratory sensitization, breathing difficulties if inhaled
H 335 May cause respiratory irritation.
H 351 Suspected of causing cancer
H 373 Separated exposure causes damage to organs

Precautionary statements:

P233 Keep container tightly closed
P280 Wear protective gloves / protective clothing / eye protection
P333+P313 If skin irritation or rash occurs, get medical attention
P501 Dispose of contents/ container in accordance with applicable regulations.

Special Provisions:

EUH204 Contains isocyanates. May produce an allergic reaction.

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 of 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.