



Material Safety Data Sheet

September 2011

1. Identification of the substance / preparation and company.

Product details: Water-base Protective ClearCoat for Dura Guard TFC

Trade name: ARDEX WPM359 Clear Top-Coat

Manufacturer: Ardex Singapore Pte. Ltd.
26 Tuas Avenue 4
Singapore 639376
Tel: +65 6861 7700
Fax: +65 6862 3381

2. Composition / information on ingredients.

UN CODE No :	NA	D.G. CLASS :	NA	SUBSIDIARY RISK :	NONE
HAZCHEM CODE :	NA	POISONS :	5	MFR'S CODE :	CLEAR WFN-X103
TOXIC SUBSTANCES SCHEDULE:	Not Listed	MARINE POLLUTANT :	NA		

USE: Preparation of SYNTHETIC COPOLYMER EMULSIONS, special functional fillers and additives.
Protective water repellent clear coating (film) for masonry, floor coatings, other bldg materials

3. Hazard identification.

Health Effects

Swallowed May cause nausea. If liquid enters lungs, may cause lung damage.

Eyes May cause slight temporary irritation and soreness

Skin May cause dryness, skin irritation, dermatitis if exposure is repeated, prolonged

Inhaled May cause nausea, headache, irritation of nose, throat irritation.

Chronic No known health hazard

Toxicity Low, from available data. Long term experience of this product type indicates no danger to health when handled under industrial conditions.

4. First aid measures.

Swallowed If swallowed, drink water immediately. Do not induce vomiting. Seek medical attention.

Eye Flush with plenty of water for 5-10 minutes. Seek medical attention if irritation persists.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water for 15 minutes. DO NOT use solvents to remove product from skin. Wash clothing thoroughly before reuse. Consult a physician if irritation persists.

Inhaled Remove to fresh air location. If discomfort persists, seek medical advice.

FA Facilities Provide eye washing facilities

ADVICE TO DOCTOR (EMERGENCY TREATMENT)

Treat symptomatically. The decision whether to induce vomiting or not should be made by an attending physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Supportive care. Treatment based on the sound judgment of the attending physician and the individual reactions of the patient.



5. Fire-fighting measures.

Suitable extinguishing media: CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Protective equipment: No special measures required.

6. Accidental release measures.

No dangerous materials released. Prevent large quantities entering drains, sewers and ground water. Large spillages can be pumped into containers, small spillages soaked up with absorbent materials, (e.g. sand, sawdust, etc.).

7. Handling and Storage.

This product is NOT classified as a Dangerous Good for the purpose of storage or transportation.

Store in a cool dry place away from heat and ignition sources. Do not store in areas where the maximum temperatures can exceed 50°C. If stored in bulk, then fumes could arise in tank. Observe safe tank entry procedure. Keep partially used product containers closed. Store away from foodstuffs, clothing. Keep out of reach of children.

Spills

Minor : Absorb with sand, sawdust or an absorbent clay. Alternatively add calcium or alum to the spill to coagulate solids. Dispose to landfill after drying.

Major : Immediately contain, then pump to a container. Prevent entry to municipal sewers & open water.

Disposal

Separate solids by coagulation or drying. Place in secure container for disposal. Burn in an adequate incinerator or bury to dispose in an approved land-fill in accordance with State and /or Local Government regulations.

FIRE / EXPLOSION

Flammable Limits in Air (% vol)	LEL : None	UEL : None
Extinguishing Media	Any. (For surrounding fire, use appropriate media.)	
Fire Fighting	Material can splatter at temperatures > 100°C. Dried product can burn.	
Additional Hazards	Smoke inhalation from ignition of dried polymer.	
Decomposition Products	May yield acrylic monomers on thermal decomposition	
Hazardous Reaction	None known. Product is stable.	
Hazardous Polymerization	Will not occur.	
Instability	NIL --- Avoid temperatures above 165°C.	
Toxicological Information	As stated earlier under toxicity data available for this material.	

8. Exposure controls/personal protection.

EXPOSURE LIMITS

WORKPLACE EXPOSURE STANDARD

Component	TWA (8 hr)	ppm	mgm/m ³ TLV	ppm	mgm/m ³
Butyl Acrylate		10	55	---	---
Styrene Monomers		50	215	100	425

ENGINEERING CONTROLS

VENTILATION: General ventilation is usually adequate. Where product is used in an enclosed area, some form of local extraction is recommended. It is not expected that the above Exposure Standards will be exceeded in any use of this product, having regard to the trace amounts of the listed items in the product.

PERSONAL PROTECTION

Eyes: Use of chemical splash goggles is recommended
Hands/Feet: PVC, rubber or neoprene footwear / gloves are recommended



Respiratory: No problems foreseen. A half mask, air-purifying respirator is recommended if and when the airborne concentrations

rises to around 10 times of the TWA/TLVs listed in the Exposure Limit Information

Flammability: Not flammable under normal conditions of use.

FLAMMABILITY LIMITS (%)

Lower Explosive Limit Not Applicable

Upper Explosive Limit Not Applicable

SOLUBILITY in H₂O Can be diluted

Although this product does not meet the parameters for flammability, it can burn in the presence of a strong ignition source after water has been removed from the product. Material can splatter at temperatures > 100°C

9. Physical and Chemical Properties.

APPEARANCE:	Viscous Liquid	PERCENT VOLATILE:	66-68% W/W
SPECIFIC GRAVITY:	1.0 -- 1.1 approx	FLAMMABILITY LIMITS:	NA
FLASH POINT:	Non combustible	AUTO IGNITION:	Not determined
ODOUR:	NIL	BOILING POINT:	> 90°C

INGREDIENTS

CHEMICAL ENTITY	CAS NO	PROPORTION
Synthetic Copolymer Emulsion blend	Proprietary	>38
Ester Alcohol	025265-77-4	< 1.0
Specialized Functional Fillers	Proprietary	2.0
Performance additives	Proprietary	>2.3
Other diluents	NA	50-54

10. Stability and reactivity.

Stable when stored correctly, no dangerous reactions or decomposition products known.

11. Toxicological information.

These products are not subject to classification according to current guidelines.

12. Ecological information.

Water hazard class 1 (self assessment): slightly hazardous for water. Do not allow undiluted product or large quantities to reach ground water, lakes, rivers or sewage systems.

13. Disposal considerations.

Dispose of empty containers or surplus product at a place authorized to accept builders waste. Clean empty containers can be recycled. Small quantities and dried product can be disposed of with household waste. For environmental reasons do not dispose indiscriminately in the liquid state.

14. Transport information.

Not classified as hazardous for transport purposes.

15. Regulatory information.

These products are not subject to identification under the EC Directives and Regulations on Hazardous Materials. This Product Data Sheet does not constitute a workplace risk assessment.



16. Other information.

The information provided in this Safety Data sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered and does not constitute a warranty or a quality specification or that the goods are suitable for a particular purpose. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. No warranty either express or implied or statutory is made in this document, except as expressly stated in any sale and purchase agreement entered into between the company and the buyer. The information given above is based on the most accurate information available at the time of writing and is given in good faith, but is subject to change without notice.



Material Safety Data Sheet

Sept 2011

1. Identification of the substance / preparation and company.

Product details: Water-base Slip Resistant Trafficable Floor Coating System

Trade name: ARDEX WPM359 Pigment

Manufacturer: Ardex Singapore Pte. Ltd.
26 Tuas Avenue 4
Singapore 639376
Tel: +65 6861 7700
Fax: +65 6862 3381

2. Composition / information on ingredients.

UN CODE No:	NA	D.G. CLASS:	NA	SUBSIDIARY RISK:	NONE
HAZCHEM CODE:	NA	POISONS:5		MANUFACTR CODE:	FAPSG

TOXIC SUBSTANCES SCHEDULE Not Listed

MARINE POLLUTANT : NA

USE: Solution of SYNTHETIC POLYMER EMULSIONS and Specialized Functional Fillers Used in construction and marine industries and as an industrial non-slip coating. A fully water-base coating product, non toxic, non-flammable, non-hazardous.

3. Hazard identification.

Health Effects

Swallowed May cause nausea

Eyes May cause light irritation and soreness

Skin May cause slight skin irritation

Inhaled May cause nausea, headache, irritation of nose, throat and lungs

Chronic No known health hazard

Toxicity Low, from available data. Long term experience of this product type indicates no danger to health when handled under industrial conditions.

4. First aid measures.

Swallowed If swallowed, immediately drink water. Do not induce vomiting. Seek medical attention.

Eye Flush with plenty of water for 15 minutes. Seek medical advice promptly.

Skin Remove contaminated clothing. Wash skin thoroughly with soap and water for 15 minutes. DO NOT use solvents to remove product from skin. Wash clothing thoroughly before reuse. Consult a physician if irritation persists.

Inhaled Remove to fresh air location. If discomfort persists, seek medical advice.

FA Facilities Provide eye washing facilities

ADVICE TO DOCTOR (EMERGENCY TREATMENT)

Treat symptomatically. The decision whether to induce vomiting or not should be made by an attending physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Supportive care. Treatment based on the sound judgment of the attending physician and the individual reactions of the patient.



5. Fire-fighting measures.

Suitable extinguishing media: CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Protective equipment: No special measures required.

6. Accidental release measures.

No dangerous materials released. Prevent large quantities entering drains, sewers and ground water. Large spillages can be pumped into containers, small spillages soaked up with absorbent materials, (e.g. sand, sawdust, etc.).

7. Handling and Storage.

Storage / Transport

This product is NOT classified as a Dangerous Good for the purpose of storage or transportation. **Store in a cool place away from heat and ignition sources.** If stored in bulk, then fumes could arise in tank. Observe safe tank entry procedure. Do not store in areas where the maximum temperatures can exceed 46°C. Keep partially used product containers closed. Store away from foodstuffs, clothing and keep out of reach of children.

Spills

Minor: Absorb to sand, sawdust or absorbent clay. Alternatively add calcium or alum to the spill to coagulate solids. Dispose to landfill after drying.

Major: Immediately contain, and then pump to a container. Prevent entry to municipal sewers & open water.

Disposal

Separate solids by coagulation or drying. Place in secure container for disposal. Burn in an adequate incinerator or bury to dispose in an approved land-fill in accordance with State and /or Local Government regulations.

FIRE / EXPLOSION

Flammable Limits in Air (% vol)

LEL : None

UEL : None

Extinguishing Media

Any. (For surrounding fire, use appropriate media.)

Fire Fighting

The material can splatter in temperatures > 100°C. The dried polymer is combustible (as plastic).

Additional Hazards

Smoke inhalation from ignition of dried polymer.

Decomposition Products

May yield acrylic monomers on thermal decomposition

Hazardous Polymerization

Will not occur.

Instability

NIL --- Avoid temperatures above 165°C.

Toxicological Information

As stated earlier under toxicity data available for this material.

8. Exposure controls/personal protection.

EXPOSURE LIMITS WORKPLACE EXPOSURE STANDARD

Component	TWA (8 hr)	ppm	mgm/m3	TLV	ppm	mgm/m3
Butyl Acrylate		10	55		---	---
Styrene Monomers		50	215		100	425
Ammonia		25	18		35	27

ENGINEERING CONTROLS

VENTILATION : General ventilation is usually adequate. Where product is used in an enclosed area, local extraction is recommended. It is not expected that the above Exposure Standards will be exceeded in any use of this product, having regard to the trace amounts of the listed items in the product.

PERSONAL PROTECTION

Eyes: Use of chemical splash goggles is recommended

Hands/Feet: PVC, rubber or neoprene footwear / gloves are recommended

Respiratory: No problems foreseen. A half mask, air-purifying respirator is recommended if and when the airborne concentrations rises to around 10 times of the TWA/TLVs listed in the Exposure Limit Information

Flammability: Not flammable under conditions of use.

**FLAMMABILITY LIMITS (%)**

Lower Explosive Limit	Not Applicable
Upper Explosive Limit	Not Applicable
SOLUBILITY in H ₂ O	Can be diluted

Although this product does not meet the parameters for flammability, it can burn in the presence of a strong ignition source after water has been removed from the product. Material can splatter at temperatures > 100°C

9. Physical and Chemical Properties.

APPEARANCE :	Thick Liquid	PERCENT VOLATILE :	35% W/W
SG Body / Topcoat :	1.4 / 1.05 approx	FLAMMABILITY LIMITS :	LFL 1.1%
FLASH POINT :	NA	AUTO IGNITION :	Not determined
ODOUR :	NIL	BOILING POINT :	> 90°C

INGREDIENTS

CHEMICAL ENTITY	CAS NO	PROPORTION
Synthetic Copolymer Emulsion Blend	Proprietary	50-60
Ester Alcohol	025265-77-4	1.0 max
Titanium Dioxide Pigment	013463-67-7	9-12
Iron Oxide Pigment	051274-00-1	3-4
Inert Fillers, micro-silica	014807-96-6	2-3
Calcium Carbonate	001317-65-3	14-20

WPM-359 TFC comprises : Primer, Body-Coat, Clear Top-Coat.

10. Stability and reactivity.

Stable when stored correctly, no dangerous reactions or decomposition products known.

11. Toxicological information.

These products are not subject to classification according to current guidelines.

12. Ecological information.

Water hazard class 1 (self assessment): slightly hazardous for water. Do not allow undiluted product or large quantities to reach ground water, lakes, rivers or sewage systems.

13. Disposal considerations.

Dispose of empty containers or surplus product at a place authorized to accept builders waste. Clean empty containers can be recycled. Small quantities and dried product can be disposed of with household waste. For environmental reasons do not dispose indiscriminately in the liquid state.

14. Transport information.

Not classified as hazardous for transport purposes.

15. Regulatory information.

These products are not subject to identification under the EC Directives and Regulations on Hazardous Materials. This Product Data Sheet does not constitute a workplace risk assessment.



16. Other information.

The description of the product and the properties of the product contained in this document is for the sole purpose of identifying the product and describing its properties and does not constitute a specification or a warranty that the product or its properties shall conform to that description; nor is the description of the product and /or its properties a warranty that the goods are suitable for a particular purpose. No warranty either express or implied or statutory is made in this document, except as expressly stated in any sale and purchase agreement entered into between the company and the buyer. The information given above is based on the most accurate information available at the time of writing and is given in good faith, but is subject to change without notice.