Durex® Dur-A-Fast Wearcoat

Polyurethane Methyl Methacrylate based Traffic Bearing Wear Resistant Coating

Description

Durex® Dur-A-Fast Wearcoat is a polyurethane modified methyl methacrylate pigmented wear course coating to be used in conjunction with Durex® Dur-A-Fast Traffic Bearing Waterproofing Systems. Durex® Dur-A-Fast Waterproofing Systems are a series of rapid return to service, high performance, UV resistant decorative and functional traffic bearing waterproofing systems. Durex® Dur-A-Fast Wearcoat is a rapid curing, abrasion resistant, elastomeric coating which protects the surface and creates a tough, impermeable layer to protect the membrane, substrate or previous layers. It is designed to be ready to top coat within 45 minutes of application.

Uses

Durex® Dur-A-Fast Wearcoat is used as a wear coat for all Durex® Dur-A-Fast Traffic Bearing Waterproofing Systems to protect and add strength to the coating system for traffic bearing applications. Durex® Dur-A-Fast Wearcoat can be used in virtually all seasons, as it can be applied down to -20°C.

Ideal For

- Balcony terraces and pedestrian walkways
- Parking Decks
- Mechanical rooms
- Plaza, pool and recreational decks, and vehicular ramps
- Stadiums
- Non-potable water retention tanks, cooling towers and secondary containment

Features

- Polyurethane modified Methyl Methacrylate based technology
- Extremely rapid curing, ready for topcoat within 45 minutes (depending on temperature).
- Cold curing capability, cures down to -20°C
- Outstanding water impermeability sealing properties
- Excellent water immersion properties
- High chemical resistance to acids, alkalis, salts, seawater, sewage and other compounds
- Fast curing properties
- Abrasion resistant, tough product
- UV Resistant

TECHNICAL DATA

PHYSICAL PROPERTIES		
Colour	Off White	
Resin Type	PUMA	
Mix Ratio	Part A (resin): Part B (Catalyst)	
Cure Time @ 23°C	To touch: 30 minutes To recoat: 45 minutes Traffic: 2 hours	
Pot Life @ 23°C	10 minutes	
Coverage	0.6 m^2/L (25 ft^2/gal) @ 65 mils	**varies on system**

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Percent Solids	ASTM D7232-06	100%
V.O.C. & Absorption	ASTM D 3960	0 g/L
Recycled Content		51%
Specific Gravity	ASTM D 333	1.20 ± 0.05 g/L
Mixed Viscosity	ASTM D2196	1500 cps
Abrasion Resistance	ASTM 5178-91, CS-17 wheel	-
Tensile Strength	ASTM D 638-86	1,500 psi
Tear Strength	ASTM D624 Die C	130 lb/in.in
Elongation	ASTM D 638-86	200%
Low Temperature Flexibility	1/8" Mandrel @ 26°C	Pass
Water Absorption	ASTM D 570	0.15%
Shore A Hardness	ASTM D 2240	95
Pull-Off Strength of Coatings	ASTM D 4541	-
Water Vapour Permeability	ASTM E 96	0.20 Perm In. 0.0025 ng/Pa·s·m^2
Water Vapour Permeance	ASTM E 96	4.70 x 10 - 5 perm 0.028 ng/ Pa·s·m^2

Packaging

Durex® Dur-A-Fast Wearcoat is packaged in 18.9 L (5 gal) and 3.78 L (1 gal) kits, as well as bulk containers. Custom colour matching can also be attained at an additional cost.

Storage Conditions

Store Durex® Dur-A-Fast Wearcoat in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store between 5°C and 25°C. **KEEP FROM FREEZING**.

Surface Preparation

Concrete, wood and metal surfaces must be dry, free of dirt, oils, and any other contaminants that may prevent proper adhesion. All surfaces to be coated are to be primed with Durex® Dur-A-Fast Primer. Durex® Dur-A-Fast Wearcoat is designed to be installed as part of the Durex® Dur-A-Fast Traffic Bearing Waterproofing System line. Inter-coat adhesion times are to be followed at all times. Contact Durabond Technical Services for applications beyond inter-coat window, surface preparation methods for contaminated surfaces and all applications not available within Durex® Dur-A-Fast Systems' specifications.

Mixing Instructions

Mixing shall be carried out in a clean, rust-free container, and mixed by a power-drill at 400-500 rpm maximum. Do not mix Part A and Part B together until ready for application, only mix materials to be used within working time window. Mix full kit as provided of Part 'A' resin with Part 'B' Dur-A-Fast Initiator. The Part 'B' Initiator must be mixed depending on subsrate and ambient temperature. Please refer to the "Dur-A-Fast Initiator Consumption Chart" below. Mix Part A and Part B Initiator together slowly, using a low speed drill for a minimum of 2 minutes, ensuring that both components are thoroughly mixed and there is a consistent colour without any residue remaining on the sides of the pail. Extra care must be taken to avoid introducing air into mixture.

Durex® Dur-A-Fast Initiator Mixing Chart

Temperature C	Initiator %	g/ 3.78L (1 Gallon)	g/18.9L (5 gallons)	Cold Cure Accelerator	g/ 3.78L (1 Gal)	g/18.9L (5 Gal)
30 to 35C	0.50%	14	72	N/A	N/A	N/A
25 to 30C	1%	29	144	N/A	N/A	N/A
20 to 25C	1.5%	43	216	N/A	N/A	N/A
15 to 20C	2%	58	288	N/A	N/A	N/A
10 to 15C	3%	86	432	N/A	N/A	N/A
5 to 10C	4%	115	576	N/A	N/A	N/A
0 to 5C	5%	144	720	N/A	N/A	N/A
0 to -5C	5%	144	720	0.50%	14	72
-5 to -10C	5%	144	720	1%	29	144
-10 TO -20C	5%	144	720	2%	58	288

Application

Apply Durex® Dur-A-Fast Wearcoat with a notched squeegee at a uniform thickness of 65 mils DFT (or as specified) to form an effective traffic bearing wearcoat, broadcasting silica sand to excess for additional strength. Measure wet film mil thickness with a thickness gauge. Allow Durex® Dur-A-Fast Wearcoat to cure for at least 30 minutes prior to application of topcoat. Substrate temperature must be at least 3 degrees Celsius above dew point prior to application. Warm, humid environments will cure more rapidly. Specified Durex® Dur-A-Fast Topcoat must be applied within 2 hours of application. Consult with Durabond Technical Services for further information.

Limitations

Do not apply Durex® Dur-A-Fast Wearcoat if ambient and substrate temperature is less than minus 20 degrees C or above 32 degrees C during application and curing time. Topcoat with Durex® Dur-A-Fast Wearcoat, Sealcoat or Dur-A-Fast Gemstone PMMA within 2 hours (depending on system). Always adhere to published recoating schedules to ensure coating adhesion. Product must be applied in temperatures 3 degrees C above the dew point. Do not add solvent to the mixture.

Clean-up

Wash all tools and equipment immediately with mineral Xylene or solvent-based cleaner. Allow any unused product to harden in container and discard according to local regulations.

Health and Safety

Read published Safety Data Sheet prior to use and handling. Use under well ventilated conditions with appropriate protective clothing and eyewear when handling the product. Avoid contact with eyes and contact with skin. If contact occurs, flush immediately with water and seek medical attention if irritation occurs. Harmful if swallowed. Keep product out of reach of children. Read published Safety Data Sheet for additional information.

Warranty

Durabond warrants this product is free of manufacturing defects, and will replace at no charge, provided it has been applied within 12 months of purchase, it has been installed for uses suitable for this product and in accordance with the manufacturer's instructions.

Technical Services

Technical support is available upon request at info@durabond.com. For the latest version of this data sheet, please visit our website at www.durabond.com, call toll free at 1-877-DURABOND (387-2266) or speak with your Durabond Technical Coatings Ltd. sales representative.