Durex Aquathane

Pigmented Water-Based Urethane Coating

Description

Durex® Aquathane Pigmented Water-Based Urethane Coating is a catalyzed, very durable and high-performance water-based, self-cross-linking aliphatic urethane coating. It is specially formulated as a durable, UV-resistant flooring topcoat. Durex® Aquathane may also be used to coat plastics such as PVC, primed polypropylene and exterior grade vinyl.

Uses

Durex® Aquathane Pigmented Water-Based Urethane Coating is designed as a UV-resistant flooring topcoat for interior and exterior surfaces. It can also be used to coat wood and plastics such as PVC, primed polypropylene and exterior grade vinyl.

Ideal For

- · Protection of epoxy-coated floors against ultraviolet rays
- . Sheen control for resinous floors
- · Retail stores, office buildings, commercial applications and other uses where a durable floor surface is required
- · Warehouse and production floor areas
- · Windows, door frames, shutters, baseboards and railings

Features

- · Water-based polyurethane; easy and safe to handle
- UV resistant and excellent exterior weathering properties
- . Excellent elasticity and elongation properties
- Excellent resistance to abrasion, water, mildew and chemicals
- · Leveling, floor and microform-free properties
- · Fast drying and early water resistance
- Non-staining
- · Available in Gloss, Semi-Gloss and Satin

TECHNICAL DATA

PHYSICAL PROPERTIES		
Colour	Please see <i>Durex® Colour Selection Guide</i> for available colour options.	
Resin Type	Aliphatic urethane	
Coverage	11-12 m ² /L (400-500 ft ² /gal) @ 25 microns (3 mils DFT)	
	Note: 2 coats recommended for best results	
Mix Ratio	Part A: Part B (Crosslinked)	
	100:1 by volume	
Drying Time @ 23°C (75°F),	To touch: 1-2 hours	
55% Relative Humidity	Light handling: 24 hours	
	Fully cured: 7 days	
Pot Life	24 hours	
V.O.C.	< 100 g/L (1.25 lb/gal)	
pH Level	8.0 – 9.5	

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
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Percent Solids	ASTM D7232-06	45 ± 5% (vol.) Pigmented
Viscosity (Brookfield) 23-30°C (75-85°F)	ASTM D2196	1,000-2,000 cps
Sheen (60°)	ASTM D523	Gloss: 85-90% Semi-gloss: 70-80% Low sheen: 5-20%
Pencil Hardness	ASTM 3363	F-HB
Abrasion Resistance	ASTM D4060-01 (ISO 7784-2)	1000 cycles CS-10 wheel: 20 mg loss
Elongation (Mandrel Bend)	ASTM D522	Pass 0.25", 180°
Water Immersion	ASTM D870	Pass: No blister; after 500 hrs @ 38°C
Accelerated Aging	ASTM D4587	Pass: 1096 hrs QUV 98% Gloss retention
Adhesion on Vinyl	ABS ASTM D2179	Pass 5-Rating
Impact Test	ASTM D2794	Pass Direct/Indirect >56 in./lb
Specific Gravity		1.03 ± 0.01 g/L 8.6 ± 0.08 lb/gal

Packaging

Durex® Aquathane Pigmented Water-Based Urethane Coating is packaged as a kit based on mixing ratios (Part A & B) in 18.9 L (5 gal) and 3.78 L (1 gal) units. This product is available in multiple standard colours. Custom colour matching can also be attained at an additional cost. Please refer to the *Durex® Colour Selection Guide* for all available colour options.

Storage Conditions

Store Durex® Aquathane in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store liquid materials in ambient temperatures above 10 degrees C and below 35 degrees C. **KEEP FROM FREEZING**.

Surface Preparation

Surfaces to be coated shall be clean, dry, structurally sound and free of laitance, dust debris or other materials deleterious to adhesion. Mechanical abrasion is required for surfaces that have been coated for more than 24 hours. New concrete and masonry mortar shall be allowed to cure for a minimum of 28 days and to achieve a compressive strength of concrete of at least 25 MPa (3,625 psi) before coating. Clean plastic surfaces with isopropyl alcohol. For coating over polyethylene or polypropylene plastics, always use a suitable adhesion promoter. For wood substrates pre-finished by UV curing coatings or other seamless coatings, use Durex® Acrotel SuperBond Primer as a sanding-free primer. Consult Durabond Technical Services for further information.

Mixing Instructions

Durex® Aquathane is a catalyzed product that is to be mixed with a small amount of crosslinker (approximately equal to 1% of volume). Mix the crosslinker with a power mixer for at least one (1) minute. Pot life of catalyzed coating is 24 hours at 23 degrees C.

Application

Prepare a test patch to verify the effectiveness of the cleaning process and to check product adhesion to the surface. Apply materials at ambient temperatures above 5 degrees C. Durex® Aquathane can be applied using a lint-free roller, spray gun or brush. Use a good-quality synthetic brush (75-100 mm) to paint floor edges first. Then use a lint-free 12.7 mm (1/2 in.) nap roller to apply an even coat of Durex® Aquathane. Maintain a wet edge to prevent overlap of marks and gloss differences. For spray applications, any type of airless paint spray gun is suitable. Durex® Aquathane is designed as a thin-build, one-coat system and is sufficient to protect the surface. However, for increased protection, additional coats of Durex® Aquathane can be used as desired.

Note: Film formation of Durex® Aquathane Pigmented Water-Based Acrylic/Urethane Plastic Coating is dependent on temperature and humidity. Minimum Film Formation Temperature is 10 degrees C (50 degrees F) and Maximum Relative Humidity is 60%. A lower temperature and higher humidity will result in a longer curing time.

Clean Up

Clean tools and equipment immediately with warm water and mild detergent. Allow any unused product to harden in container and discard according to local regulations.

Limitations

Durex® Aquathane Pigmented Water-Based Acrylic/Urethane Plastic Coating is not recommended to be used in wet environments, especially as floor coatings. Continuous pressurized water washing is not recommended.

Health and Safety

Use under well-ventilated conditions with rubber gloves when handling the product. Avoid contact with eyes and prolonged contact with skin. If contact occurs, flush immediately with water and seek medical attention if irritation occurs. Harmful if swallowed. Do not induce vomiting. Drink 1-2 glasses of water or milk. Keep product out of reach of children. Read published Material 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.

