# **Durex** Polyuretel

## High-Build, UV-Resistant Polyaspartic Floor Coating

#### Description

Durex® Polyuretel High-Build UV-Resistant Polyaspartic Floor Coating is a two-component, polyaspartic based, liquid-applied protective floor coating. This fast-curing, very low VOC formulation has a low viscosity with outstanding "wetting" properties, abrasion and UV resistance for colour and gloss stability, with exceptional weathering- and chemical-resistance properties.

#### Uses

Durex® Polyuretel High-Build UV-Resistant Polyaspartic Floor Coating is a roller-, brush- or spray-applied topcoat used in a wide range of institutional, commercial and industrial floor applications where long term durability, impact, abrasion and chemical resistance is required. This product is used as a clear or pigmented protective topcoat used in both interior and exterior applications.

#### **Ideal For**

- · Protect epoxy-coated floors against yellowing used in institutional, commercial and industrial areas
- Retail stores, office buildings, hotels, casinos, restaurants, entertainment venues, lobbies and other uses where a durable floor surface is required
- · Food processing plants, pharmaceutical plants and laboratories
- Warehouse and production floor areas
- · Coating metal, aluminum, steel and bronze

#### **Features**

- · Very low VOCs, fast setting and easy to apply
- · Resistant to weathering and colour fade by ultraviolet rays
- · Wide service temperature range
- · Excellent abrasion and impact resistance
- Good flow and leveling properties for finishing
- Excellent gloss retention, hardness and non-yellowing properties
- High tear resistance and tensile strength
- · Non-staining chemical resistance
- · Adheres to fiberglass, concrete, masonry, plastics, metals and wood
- . May be used to protect walls and other vertical surfaces
- Available in Slow and Fast Cure versions

### **TECHNICAL DATA**

PHYSICAL PROPERTIES		
Colour	Please see Durex® Colour Selection Guide for available colour options.	
Coverage	4 m <sup>2</sup> /L @ 250 microns 160 ft <sup>2</sup> /gal @ 10 mils DFT ( <i>Note</i> : 2 coats recommended for best results)	
Mix Ratio	Part A (Resin): Part B (Catalyst) 2:1 by volume (Clear)	
Cure Time @ 23°C (75°F)	To touch: 4-6 hours Light traffic: 12-14 hours Fully cured: 1 day	
Pot Life – working time @ 23°C (75°F)	15 minutes	
Reducer	Lacquer thinner or IPA	
V.O.C.	10 g/L	

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Percent Solids	ASTM D7232-06	98%
Mixed Viscosity 23°C (75°F)	ASTM D2196	1,050 cps
Specific Gravity	ASTM D333	Clear: $1.07 \pm 0.01 \text{ g/L}$ (8.90 ± 0.1 lb/gal)
Tensile Strength	ASTM 695-85	6,800 psi
Taber Abrasion Resistance	CS-17 wheel	25 mg, 100 g load, 1000 cycles
Elongation	ASTM D638-86	15%
Shore D Hardness		70
Hardness (7 Days)	ASTM D3363	2H
Mar Resistance	ASTM D5178-91	1.0 kg
QUV Weathering	ASTM D4587	90% (1000 hrinitial) Gloss retention: 80% (final), no chalking
Colour Retention	ASTM D4587	ΔΕ 1.125 @ 1000 hours
Service Temperature Range		-40°C to 120°C

**Packaging** 

Durex® Polyuretel High-Build UV-Resistant Polyaspartic Floor Coating is packaged in 18.9 L (5 gal) and 3.78 L (1 gal) pails. 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® Polyuretel High-Build UV-Resistant Polyaspartic Floor Coating 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 debris or other materials deleterious to adhesion. New concrete and masonry mortar shall be allowed to cure for a minimum of 28 days with a compressive strength of at least 25 MPa (3, 625 psi) and shot-blasted before coating. Clean surfaces to remove dirt, loose materials and debris. Durex® Polyuretel can be applied direct to a number of substrates. Prime using Durex® Epotel Multi-Prime. Please contact Durabond Technical Services for further priming recommendations. Durex® Polyuretel can be used as a primer if the substrate is carefully prepared and moisture content has been deemed acceptable. Treat cracks using Durex® Epotel 100 Joint and Crack Filler. Maintain temperature in work areas to receive floor coating at a minimum of 15 degrees C for at least 24 hours before application, during application, and until coatings have fully cured. Provide adequate ventilation where flooring is being applied. Maintain a dust-free environment for duration of work. Erect suitable barriers to prevent through traffic or other trades from entering working area during installation of floor coating and to protect adjacent surfaces from damage.

**Mixing Instructions** 

DO NOT MIX PART 'A' WITH PART 'B' UNTIL YOU ARE READY TO BEGIN APPLICATION. Durex® Polyuretel is supplied as a kit based on mixing ratio. Mixing shall be carried out in a clean, rust-free container, and mixed by a low-speed mixer with appropriate mixing blade to avoid the creation of air bubbles. Mix two (2) parts by volume of Part 'A' urethane resin with one (1) part by volume of Part 'B' amine binder. Mix for at least one (1) minute at low speed. Durex® Polyuretel must be applied immediately for best working time and results.

**Application** 

THOROUGHLY MIX PRIOR TO USE. DO NOT DILUTE. It is recommended to prepare a test patch to verify the effectiveness of the cleaning process, and to check product adhesion to the surface. For exterior applications, do not proceed with applications prior to, during or after inclement weather conditions, or if adverse weather is anticipated within 24 hours after application. Apply materials at ambient temperatures above 10 degrees C. Apply materials using a good-quality synthetic brush 75-100 mm (3 in. to 4 in.) wide to paint the perimeter edges and a lint-free 12.7 mm (1/2 in.) nap roller to apply a uniform wet film coating of 10-15 mils. Apply a uniform coating with several passes to ensure complete coverage. Subsequent coats may be applied when the previous coat is dry to the touch. Apply a maximum of two (2) coats within a 24 hour period. Ensure that the final stroke of the roller is always in the same direction and with the same pressure applied to the roller. Maintain a wet edge to prevent overlap marks and gloss differences. Materials may also be squeegee applied at 5-16 mils thick to produce a high-gloss smooth finish or be applied using a plural component sprayer. Contact Durabond Technical Services for further information and recommendations.

Clean-Up

Regular cleaning will maintain these systems in serviceable condition. However, certain textures and service environments require specific procedures. Contact Durabond Technical Services for further information and recommendation.

**Health and Safety** 

Use under well-ventilated conditions with appropriate respirator approved for organic vapours and 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.

