Durex Acrutel-100

High-Durability, UV-Resistant Aliphatic Polyurethane Topcoat

Description

Durex• Acrutel-100 High-Performance UV-Resistant Polyurethane Flooring Topcoat is an aliphatic, water-based, thin-build, liquid-applied urethane coating. This highly durable, high performing formulation offers excellent abrasion and UV resistance for colour and gloss stability for decorative resinous flooring and wall systems.

Uses

Durex[®] Acrutel-100 High-Performance UV-Resistant Polyurethane Flooring Topcoat is a roller-applied protective topcoat used in a wide range of institutional, commercial and industrial floor applications where long-term durability, UV and abrasion resistance is required.

Ideal For

- . Protection of epoxy-coated floors & walls
- . Sheen control for resinous floors & walls
- . Commercial and Recreational resinous flooring topcoat
- · Warehouse and production floor areas
- · Hospitals, Health Care, Pharmaceutical Facilities, Laboratories (Including Clean Rooms)

Features

- · Water-based, aliphatic polyurethane, easy to apply
- . Meets requirements of CFIA and USDA for food manufacturing facilities
- . Resistant to weathering and colour fade by UV rays
- · Wide-service temperature range
- . Excellent abrasion and impact resistance
- . Good flow and leveling properties for finishing
- · Non-staining chemical resistance
- · Available in different finishes: Gloss, Semi-gloss, Satin and Matte
- · Available in non-slip additive
- · Low VOC, Low Odour.

TECHNICAL DATA

PHYSICAL PROPERTIES		
Colour	Clear (Finishes: Gloss, Semi-gloss, Satin & Matte)	
Resin Type	Aliphatic Polyurethane/Acrylic	
Coverage	12.2 m ² /L (500 ft ² /US gal) @ 3 mils WFT	
	Note: 2 coats recommended for best results	
Cure Time @ 23°C (75°F)	To touch: 30 minutes	
	Foot traffic: 8 hours	
	Fully cured: 7 days	
Pot Life	2 hours	
Mixing Ratio	6:1	
V.O.C.	< 65 g/L	

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
Percent Solids	ASTM D7232-06	48 ± 5% (vol.)
Viscosity (Brookfield) 23°C (75°F)	ASTM D2196	500 cps
Abrasion Resistance	ASTM D4060-01	100 g load, 1700 cycles C-S wheel: 20 mg loss
Hardness (Pencil)	ASTM D3363	2H
Hot Water Immersion	ASTM D870	Pass – no blisters after 500 hours @ 38°C (100°F)
QUV Weathering	ASTM G 154 CYCLE 7	Complete Pass 1000 hours
Impact Test	ASTM D2794	Pass direct/indirect 56 inlb
Sheen (60°)	ASTM D3679	Gloss: 80-85%
		Semi-gloss: 40-70%
		Low sheen: 5-20%
Specific Gravity	ASTM D333	1.03 ± 0.01 g/L
		8.6 ± 0.05 lb/gal
Coefficient of Friction	ASTM D2047-17	Satin: Dry: 0.78 / Wet: 0.63 Gloss: Dry: 0.77 / Wet: 0.56

Packaging

Durex* Acrutel-100 High-Performance UV-Resistant Polyurethane Flooring Topcoat is packaged in 18.9 L (5 gal), 11.34 L (3 gal) and 3.78 L (1 gal) kits. This product is available in gloss, semi-gloss, satin and matte and with a fine non-slip additive.

Storage Conditions

Store Durex[®] Acrutel-100 High-Performance UV-Resistant Polyurethane Topcoat 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

Epoxy & Polyurethane Coated Floor Surfaces: Epoxy-coated surfaces shall be clean, dry, and structurally sound and free of debris or other materials deleterious to adhesion, including amine blush. Mechanical abrasion is required for surfaces that have been coated for more than 24 hours. Previously coated surfaces shall be well bonded and free of any material that may impede adhesion. Sand and solvent wipe. Contact Durabond for technical information and assistance.

Mixing Instructions

Durex® Acrutel 100 is supplied in a 2 part kit, with Part A (resin) and Part B (Catalyst) Durex® Acrutel 100 is to be mixed with a non-air entraining, low speed (300-400rpm) electric mixer. Gently mix part A, slowly pour the Part B into the vortex and mix for at least three (3) minutes. Do not entrain air and keep the mixing paddle inside the mixture at all times. Pot life of coating is approximately 2 hours at 23 degrees C (75 degrees F). For best results apply Durex® Acrutel-100 immediately.

Application

Erect suitable barriers to prevent through traffic or other trades from entering working area during installation of floor coating and protect adjacent surfaces from damage. Provide adequate ventilation, and maintain a dust-free environment for the duration of work. Prepare a test patch to verify the effectiveness of the cleaning process and check product adhesion. Durex® Acrutel-100 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. Use a lint-free 12.7 mm (1/2 in.) nap roller to apply an even coat of Durex® Acrutel-100. Maintain a wet edge to prevent overlap marks and gloss differences. Use an airless paint spray gun for spray applications. Multiple coats of Durex® Acrutel-100 can be applied for increased protection. Multiple coats must be applied within 24 hours of completion of the previous coat. Floor must be sanded and solvent wiped if the recoat window is exceeded. Contact Durabond Technical Services for further information.

Note: Drying time of Durex* Acrutel-100 is dependent on temperature and humidity. Lower temperatures with high humidity levels will result in a longer drying time. For best results apply materials when ambient temperatures are above 15 degrees C.

Cleaning

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.

Limitations

Do not use this product if substrate and ambient temperature is less than 14 degrees C or more that 30 degrees C, and/or if relative humidity is greater than 85%. Floor must be 3 degrees C above dewpoint. Indoor use only. Introduction of airborne dust, debris, particles etc. may result in surface defects. May not completely prevent fading/discolouration of under coats. Do not apply while temperatures are rising as may result in defects.

Health and Safety

Avoid contact with eyes and prolonged contact with skin. If contact occurs, flush immediately with water and seek medical advice if irritation occurs. Harmful if swallowed. Keep product out of reach of children. Read published Material Safety Data Sheet prior to storage, handling and use.

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.

