

Description

Archco-Rigidon system 403D is a 2 component medium duty brush or airless spray applied lining. It is formulated from a Vinyl Ester resin reinforced with 0.4mm glassflakes. The lining dry film thickness is nominally 1.0mm. Further coats can be applied should the specifying authority require additional coverage.

Principal Characteristics

- * Excellent corrosion resistance
- * Very good abrasion resistance
- * Very good erosion resistance
- * Very low permeability
- * Excellent chemical resistance
- * Very good application properties
- * High temperature tolerance
- * Excellent undercutting resistance
- * Excellent repair- ability
- * Rapidity of cure

Volume Solids Percentage

Theoretical 98% at mixing time.
Practical 90-95%.

AR403D is subject to some monomer loss depending on conditions.

Corrosion and Temperature Resistance

Archco-Rigidon system 403D is resistant to corrosive mineral acids, alkalis, salts and a range of oxidising chemicals and at 2mm DFT to total immersion temperatures up to 100°C and gas temperatures up to 170°C, dependent upon the chemical type and concentration levels.

Suggested Uses

Archco-Rigidon system 403D is used primarily to protect steel from corrosive attack.

System 403D is widely used in the water treatment industry for lining filtration vessels, ion exchange vessels and applications involving effluent streams and treatment areas.

It is used extensively in the offshore oil industry for lining process vessels and is also used for lining stacks, ducts, fume scrubbers and fan cases in the power generation and chemical process industries. Inclusion of a waxed resin topcoat maximises chemical resistance by accelerating full cure. Cosmetic appearance and surface finish are also improved.

How to Order

A full material system may be ordered by simply specifying **Archco-Rigidon System 403D**.

Our quotations include a 40% wastage factor.

Contact **Archco-Rigidon** Engineers for further information.

System 403D	Vinyl Ester	
Operating Temperature Range	-20°C to +100°C (Immersed)	
Application Method	Airless spray or brush	
Surface Preparation	Grit blast to Sa2½ min	
Colour	Off white	
Catalyst Type	Archco-Rigidon C3	
Volume Solids	98%-99%	
Dry Film Thickness	375-500mic	17-20 mils
Min Substrate Temperature	10°C	
Max Humidity during Application	90% Rh	
Min Dewpoint/Substrate Differential (steel)	Dewpoint +3°C	
Flash Point	31°C	
Overcoating Times (20°C)	Min.6 hrs - Max.3 days.	
Tool Cleaning Solvent	T2 Cleaner	
Storage Temperature Limits	10°C – 20°C	
Specific Gravity	1.30	
Shelf Life	4 months	
Chemical Resistance:	For guidance only. Reference can be made to column D in the Archco-Rigidon Chemical Resistance Guide	
Extensive - refer to Archco-Rigidon for details and recommendations		

Estimated Coverages are as follows:	Theoretical Material Requirement	Practical Material Requirement
Component	Quantity/m ² / 1mm DFT	Quantity/m ² / 1mm DFT
PD2 Primer	0.06 /kg	0.15 /kg
Resin Mix	1.20 /kg	2.00 /kg
C3 Catalyst	0.03 /kg	0.05 /kg
Green Pigment	0.02kg	0.02kg
T2 Cleaner	0.50 litres	0.50 litres
Wax Topcoat (optional)	0.15 /kg	0.35 /kg

System 403D Typical Test Data		
Characteristic	Standard	Result
Abrasion Resistance	ASTM D 4060	0.035gm (smooth)
Adhesion Properties	ASTM D 952	8 Mpa
Salt Water Resistance	ASTM B 117	20,000 hrs. No effect
Cathodic Disbondment	BS 3900F11	Compatible
Tensile Strength	ASTM D 638	3975psi 280kg/cm ²
Flexural Strength	ASTM D 790	9425psi 660kg/cm ²