

Description

Archco-Rigidon system 423D 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
- * Good flexibility
- * Medium temperature tolerance
- * Excellent undercutting resistance
- * Excellent repairability
- * Rapidity of cure

Volume Solids Percentage

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

AR423D is subject to some monomer loss depending on conditions.

Corrosion and Temperature Resistance

Archco-Rigidon system 423D is resistant to corrosive mineral acids, alkalis, salts and has particularly good resistance to oxidising chemicals and at 2mm DFT to total immersion temperatures up to 85°C and gas temperatures up to 140°C, depending upon the chemical type and concentration levels.

Suggested Uses

Archco-Rigidon system 423D is used primarily to protect steel from corrosive attack.

System 423D is widely used in the water treatment industry for linings to cooling water wedge and butterfly valves, filtration vessels, and applications involving effluent streams and treatment areas.

It is used extensively in the marine industry for lining storage vessels and is also used for lining road tankers and other plant which is subject to flexural movement.

How to Order

A full material system may be ordered by simply specifying **Archco-Rigidon System 423D**.

Our quotations include a 40% wastage factor.

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

System 423D	Vinyl Ester	
Operating Temperature Range	-20°C to +85°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 Per Coat	375-500mic	17-20 mils
Min Substrate Temperature	10°C	
Max Humidity During Application	90% Rh	
Min Dewpoint/Substrate Differential	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	1.3	
Shelf Life	6 months	
Chemical Resistance: Extensive - refer to Archco-Rigidon for details and recommendations	For guidance only. Reference can be made to column D in the Archco-Rigidon Chemical Resistance Guide	

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

System 423D 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