

Ceramic Reinforced Epoxy for High Temperature and Immersion Service

Tested to NACE TM0185 - 180°C (356°F)

Chesterton's new ARC S5 offers a new level of protection for oil and gas production equipment exposed to high temperatures. This industrial coating/lining:

- Performs in immersed aqueous solution conditions up to 180°C (356°F)
- Protects and upgrades new and old metal equipment
- Replaces exotic alloys, engineered plastics, ceramics and conventional coatings
- Is easily applied by roller, brush, squeegee, or airless spray

ARC S5 is a game-changer in asset protection for oil and gas production.



Applications

- Transport oil pipelines
- Fans and housings
- Heat exchangers
- Separators
- **Ducting**
- **Pumps**
- Deaerators
- Tanks and vessels
- **Valves**

Technical Data (Mechanical property data after 7 day ambient cure)			
Composition Matrix	A two component, modified novolac epoxy resin reacted with a cycloaliphatic amine curing agent		
Reinforcement (Proprietary)	Ceramic and mineral particles to increase modulus and retard blistering while offering resistance to erosive flow		
Cured Density		1.82 gm/cc	113.62 lb/ cu.ft.
Compressive Strength	(ASTM D 695)	900 kg/cm² (88.25 MPa)	12,800 psi
Flexural Strength	(ASTM D 790)	372 kg/cm² (36.5 MPa)	5,293 psi
Flexural Modulus	(ASTM D 790)	4.7 x 10 ⁴ kg/cm ² (4,619 MPa)	6.7 x 10⁵ psi
Pull-Off Adhesion	(ASTM D 4541)	365.4 kg/cm² (35.9 MPa)	3,500 psi
Tensile Strength	(ASTM D 638)	287 kg/cm² (28 MPa)	4,080 psi
Tensile Elongation	(ASTM D 638)	2.8%	
Shore D Durometer Hardness	(ASTM D 2240)	85	
Vertical Sag Resistance at 21°C (70°F) and 500 μm (20 mil)		No sag	
Maximum Temperature (Dependent on service)	Wet Service Dry Service	180°C 210°C	356°F 410°F
Shelf life (unopened containers)	2 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility]		

Learn more at chesterton.com/ARCS5



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