

Product Datasheet: ARC S5

Sprayable coating for extreme high temperature immersion up to 180°C (356°F). Ideal for elevated temperature process vessels, and equipment exposed to heated fluids where high temperature differentials may exist.

ARC S5 industrial coating/lining:

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

Application Areas

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

Packaging and Coverage

Nominal, based on a 750 μm (30 mil) thickness

- 5 liter kit covers 6.67 m² (71.76 ft²)
- 16 liter kit covers 21.33 m² (229.63 ft²)

Note: Components are pre-measured & pre-weighed. Each kit includes mixing and application instructions. 5 liter kits include tools

Colors: Light Gray or Medium Gray





Features and Benefits

- Tested to NACE TM0185
 - 180°C (356°F)
 - 100 Bar (1450 psi)
- Unique chemistry and reinforced design
 - Resists dilute acid <70°C (160°F)
- Incorporates fine-graded sizes of reinforcements
 - Permeation resistant
 - Resistant to cold wall delamination
 - Resists thermal-mechanical shock
 - Survives rapid decompression
- Spark testable per NACE SP0188
- Easy post application holiday inspection
- High adhesive strength to metal
 - Provides long term protection
 - Protects against under-film corrosion
- 100% solids; no VOCs; no free isocyanates
 - Enhances safe use
- In-situ curing in service at elevated temperature
 - No post curing needed

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)	12800 psi
Flexural Strength	(ASTM D 790)	372 kg/cm² (36.5 MPa)	5293 psi
Flexural Modulus	(ASTM D 790)	4.7 x 10 ⁴ kg/cm ² (4,619 MPa)	6.7 x 10 ⁵ psi
Pull-Off Adhesion	(ASTM D 4541)	365.4 kg/cm² (35.9 MPa)	3500 psi
Tensile Strength	(ASTM D 638)	287 kg/cm² (28 MPa)	4080 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)	3 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility]		



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