

## Product Datasheet: ARC HT-T

100% solids, ceramic reinforced abrasion resistant epoxy that protects metal against mild abrasion, corrosion and erosion in elevated temperature immersion. ARC HT-T industrial coating is designed to:

- Rebuild and protect new and old metal equipment
- Perform in immersed aqueous solution conditions up to 110°C (230°F)
- Easily apply by trowel

## **Application Areas**

- Oil/water separators
- Oil/gas separators
- Heat exchangers
- Pressure vessels
- Tanks & vessels
- Desalting vessels
- Pumps
- Valves
- Crystalizers

## Packaging and Coverage

Nominal, based on a 750  $\mu m$  (30 mil) DFT

5 liter kit covers 6.67 m² (71.76 ft²)

Note: Components are pre-measured & pre-weighed.

Each kit includes mixing and application instructions. 5 liter kits include tools.

Colors: Black or green





## **Features and Benefits**

- Strong, Tough, Durable
  - Extends equipment lifetime
  - Reduces downtime
- Incorporates fine-graded sizes of reinforcements
  - Permeation & blister resistance
  - Resists cold wall delamination
- Spark testable per NACE SP0188
  - Easy inspection
- High adhesive strength
  - Provides reliable performance
  - No underfilm corrosion
- 100% solids; no VOCs; no free isocyanates
  - Enhances safe use
  - No Shrinkage on cure

Technical Data	(Mechanical property data after elevated temperature cure at 95°C (203°F) for 12 hours)		
Composition Matrix	A modified epoxy resin reacted with a cycloaliphatic amine curing agent		
Reinforcement (Proprietary)	Blend of ceramics providing exceptional permeation, erosion and corrosion resistance		
Cured Density		2.22 gm/cc	137.32 lb/ cu.ft.
Compressive Strength	(ASTM D 695)	949 kg/cm² (93 MPa)	13,500 psi
Flexural Strength	(ASTM D 790)	548 kg/cm² (53.7 MPa)	7,800 psi
Flexural Modulus	(ASTM D 790)	1.19 x 10 <sup>5</sup> kg/cm <sup>2</sup> (11.7 x 10 <sup>3</sup> MPa)	1.7 x 10 <sup>6</sup> psi
Pull-Off Adhesion	(ASTM D 4541)	316.9 kg/cm² (31.1 MPa)	4,510 psi
Tensile Elongation	(ASTM D 638)	3.6%	
Impact Resistance (direct) (reverse)	(ASTM D 2794)	9.03 N·m 4.5 N·m	80 in-lb 40 in-lb
Hardness Shore D	(ASTM D 2240)	90	
Vertical Sag Resistance, at 21°C (70°F) and 1.25 mm (50 mil)		No sag	
Linear Coefficient of Thermal Expansion in temperature range of 25°C-110°C (77°F-230°F) in temperature range of 125°C-150°C (257°F-302°F)	(ASTM E 228)	30.2 x 10 <sup>-6</sup> mm/mm-°C 90.3 x 10 <sup>-6</sup> mm/mm-°C	16.8 x 10 <sup>-6</sup> in/in-°F 50.1 x 10 <sup>-6</sup> in/in-°F
Maximum Temperature (Dependent on service)	Wet Service Dry Service	110°C 150°C	230°F 302°F
Shelf life (unopened containers)	2 years [stored between 10°C (50°F) and 32°C (90°F) in dry, covered facility]		



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