

High Build, Single Coat, Edge-Retentive Barrier Coating

ARC S1HB(E) is a mineral reinforced, amidoamine cured modified epoxy lining for the protection of metallic and cementitious surfaces from corrosive exposures. Its high build, edge retentive nature provides maximum coverage over hard 90° edges and corners with minimal thinning at the sharp edge.

Application Areas

- Crude oil storage tanks
- Chemical storage tanks
- Thickener tanks
- Pipelines/penstocks
- Wastewater clarifiers
- Grit chambers
- Wet wells/junction boxes
- Manholes
- Acceptable for use with cathodic protection systems

Packaging and Coverage

Nominal based on 750 µm (30 mil) DFT

- 1125 ml cartridge covers 1.50 m² (16.10 ft²)
- 51 liter kit covers 68 m² (732 ft²)
- 480 liter kit covers 640 m² (6889 ft²)

Note: Each kit is comprised of two equal size units of Part A and one equal size unit of Part B

Colors: Light Gray



Features and Benefits

- **High build capability**
 - Allows for one coat application
 - Greater than 70% edge retention
- **100% solids**
 - Low VOC's
 - Low odor
- **High dielectric properties**
 - Allows for high voltage spark testing per NACE SP 0188
- **Amidoamine curative**
 - Cures and bonds to damp and marginally prepared surfaces
- **2:1 mix ratio**
 - Simplifies heated plural component spray application

Technical Data

Composition	Matrix	A modified epoxy blend reacted with an amidoamine curing agent		
	Reinforcements	A blend of mineral fillers and thixotropic agents		
Cured Density		(ASTM D1475)	1.5 g/cc	12.4 lb/gal
Compressive Strength		(ASTM D695)	875 kg/cm ² (85.8 MPa)	12460 psi
Tensile Strength		(ASTM D638)	417 kg/cm ² (40.8 MPa)	5927 psi
Tensile Elongation		(ASTM D638)		8.9%
Pull Off Adhesion	Metal Concrete	ASTM D4541 (Metal) EN 1542 (Concrete)	>323 kg/cm ² (>31.4 MPa) >47 kg/cm ² (>4.5 MPa)	4600 psi 667 psi
Flexural Strength		(ASTM D790)	773 kg/cm ² (75.7 MPa)	11000 psi
Flexural Modulus		(ASTM D790)	4.4 x 10 ⁴ kg/cm ² (4345 MPa)	6.3 x 10 ⁵ psi
Carbon dioxide Permeability – µ CO ₂		EN 1062-6		>1.8 x 10 ⁶
Water Vapour Permeability – µ H ₂ O		ISO 7783-1/2		>1.1 x 10 ⁵
Taber Abrasion Resistance H22 wheel/ 1 Kg load / 1000 cycles		EN 5470-1		523 mg
Impact Resistance		ISO 6272-1		>= 8 Nm
Shore D Hardness		(ASTM D2240)		83
Vertical Sag Resistance			>3 mm	>120 mil
Maximum Temperature (Dependent on service)		Wet Dry	52°C 80°C	125°F 175°F