

# EPAND-592

## Technical data sheet



MAVAD ALI ALBORZ  
مهندسی مواد آلی البرز

### Product Description

A two-component high-temperature coating system resistant to water, aqueous solution, and hydrocarbons up to a temperature of 248 F (120 C) is designed specifically to provide erosion-corrosion protection in acid-contaminated water/hydrocarbon system. For use original equipment manufacture or repair situation.

### Application areas

- ) Condensate extraction pumps
- ) condensate return tanks
- ) evaporators Heat exchanger barrels
- ) oil/gas and oil/water separators
- ) autoclaves Scrubber units
- ) calorifiers

Typical Properties Property	part A	part B	mixed system
Appearance	paste	liquid	liquid
Color	dark gray	Green	gray
Density (g/cm <sup>3</sup> )	2.1	1	2.3
Pot life at 25°C, 100 g, min			30min

### Processing

#### Mix ratio Product

Part A resin

#### by weight

100

Part B hardener

8

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### Coverage rates

Recommended number of coat	2
Target thickness 1 st coat	18 mils (450 microns)
Target thickness 2 nd coat	18 mils (450 microns)
Minimum total DFT	24 mil (600 microns)
Maximum total DFT	Only limited by sag resistance
Theoretical coverage rate 1 coat	10.4 sq.ft (0.97 m <sup>2</sup> )/kg
Theoretical coverage rate 2 coat	10.4 sq.ft (0.97 m <sup>2</sup> )/kg
Theoretical coverage rate to achieve minimum recommended system thickness	7.9 sq.ft (0.73 m <sup>2</sup> )/kg

### Completion of the molecular reaction

Ambient temperature	Time until inspection	Time until full service	Time until post-cure (if required)	
			dry	wet
68 F/ 20 C	12 hours	96 hours	12 hours	12 hours
86 F/ 30 C	5 hours	18 hours	12 hours	12 hours
104 F/ 40 C	3 hours	10 hours	12 hours	12 hours

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### Typical Physical Properties

Property	value	test method
Tensile shear		
Mild steel	2300 psi (16 mpa)	ASTM D1002
Pull of adhesion	2450 psi (17 mpa)	ASTM D4541
Abrasion cs-17 wheels	32.5 (mg/cycle)	ASTM D4060
Compressive strength	14790 psi (102 mpa)	ASTM D695
Tensile strength	4790 psi (33 mpa)	ASTM D638
Flexural strength	6960 psi (48 mpa)	ASTM D790
Hardness		
Shore D	84	ASTM D2240
Barcol hardness	38	ASTM D2583
Heat resistanc	120	ASTM D648
Impact resist	25 j/m	ASTM D256

### chemical properties

Type of chemical	Product resistance	Type of chemical	Product resistance
engine oil	Excellent	30% sodium hydroxide	Excellent
50% sulfuric acid	Excellent	50%Calcium hydroxide	Excellent
30% sulfuric acid	Excellent	20%Potassium hydroxide	Excellent
37% hydrochloric acid	Excellent	20% sodium hydroxide	Excellent
20% citric acid	Excellent	30% sodium hydroxide	Excellent
Lactic acid 10%	Excellent	Petrol	Excellent
Sodium hydroxide 10%	Excellent	Toluene	Excellent
Calcium hydroxide 50%	Excellent	Crude oil	Excellent

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