

# EPAND-595

## Technical data sheet



MAVAD ALI ALBORZ  
مهندسی مواد آلی البرز

### Product Description

This product is a two-component paste adhesive that works at room temperature and creates elastic adhesion. Thixotropic without sagging to a thickness of (10 mm). Especially suitable for SMC and GRP connection.

### Advantages

- ) Toughened paste
- ) Ideal for bonding GRP, SMC and dissimilar substrates
- ) Low shrinkage
- ) Gap filling, non-sagging up to 0.394 in (10 mm) thickness
- ) High shear and peel strength

Typical Properties Property	part A	part B	mixed system
Appearance	natural paste	natural paste	natural paste
Density (g/cm <sup>3</sup> )	1.6	1.4	1.5
Viscosity at 25 C	thixotropic	thixotropic	thixotropic
Pot life at 25°C, 100 g, min			30-40 min
Processing			
Mix ratio Product		by weight	
Part A resin		100	
Part B hardener		33	

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Cure times to reach minimum shear strength						
Temperature,F	50	59	73	104	140	212
Cure time to reach LSS > 145 psi (1 mpa)						
Hours	12	7.5	4	1	-	-
Minute	-	-	-	-	17	6
Cure time to reach LSS > 1450 psi (10 mpa)						
Hours	21	13	6	2	-	-
Minute	-	-	-	-	35	7
*LSS = Lap shear strength						

### Typical Physical Properties

Property	value	test method
Average lap shear strength, metal-metal joints	1800 psi	ASTM D-1002
Average lap shear strength, plastic-plastic joints	1300 psi	ASTM D-1002
Hardness	40	ASTM D-2240
Glass transition	80	ASTM D-3418
Roller peel test	3.1	ISO-4578
Flexural strength	5800 psi	ASTM-D790

### chemical properties

Type of chemical	Product resistance	Type of chemical	Product resistance
engine oil	Excellent	30% sodium hydroxide	Excellent
10% sulfuric acid	Good	50%Calcium hydroxide	Excellent
30% sulfuric acid	Good	20%Potassium hydroxide	Excellent
37% hydrochloric	Good	20% sodium hydroxide	Excellent
20% citric acid	Good	30% sodium hydroxide	Excellent
Nitric acid 10%	Good	Methanol	Inappropriate
Sodium hydroxide	Good	Petrol	Excellent
Calcium hydroxide	Excellent	Salt water	Excellent

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