

ACC EP RPSP EPI Engineered Polymers Aliphatic Silicone Polymer

Category: Polymer, Thermoset

Material Notes:

EP RPSP Aromatic Silicone Polyurea, "Powered by Reactamine® Technology", is a two component 100% solid Polyurea with superior performance in industrial applications. EP RPSP displays extremely fast cure times with excellent adhesions to different substrates. EP RPSP can be spray applied at temperatures ranging from 20°F to 150°F. EP RPSP has excellent chemical and water resistance. EP RPSP has a temperature range of -40°F to 350°F. EP RPSP conforms to USDA and FDA guidelines for incidental food contact. Applications: EP RPSP adheres well to several substrates including concrete, steel, and wood. Some typical uses include: SECONDARY CONTAINMENT WASTEWATER LAGOON AND POOL LININGS TABLE EDGING COLD STORAGE AREAS WASH BAY AND SHOWER LININGS COOLING TOWERS PETROCHEMICAL REFINERIES OILFIELD PIPELINE COATINGS WATER PROOFING SEWER LINERS MANHOLE RESTORATION INDUSTRIAL FLOORING BRIDGE COATINGS ANTI-GRAFFITIPART of the Amber Chemical Group. Data provided by manufacturer.

Order this product through the following link:

http://www.lookpolymers.com/polymer_ACC-EP-RPSP-EPI-Engineered-Polymers-Aliphatic-Silicone-Polymer.php

Physical Properties	Metric	English	Comments
Viscosity	450 cP	450 cP	A Side
	500 cP	500 cP	B Side

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	96	96	ASTM D2240
Tensile Strength, Yield	24.9 MPa	3610 psi	ASTM D412
Elongation at Break	350 %	350 %	ASTM D412
100% Modulus	0.0165 GPa	2.40 ksi	ASTM D412
300% Modulus	0.0283 GPa	4.10 ksi	ASTM D412
Adhesive Bond Strength	>= 1.72 MPa	>= 250 psi	Wood (no primer), Delamination; ASTM D4541 Elcometer
	2.07 MPa	300 psi	Concrete (epoxy), Concrete Failure; ASTM D4541 Elcometer
	2.76 MPa	400 psi	Concrete (no primer), Concrete Failure; ASTM D4541 Elcometer
	>= 6.21 MPa	>= 900 psi	Steel (epoxy primer), Primer Failure; ASTM D4541 Elcometer
	>= 10.3 MPa	>= 1500 psi	Steel (no primer), Substrate Failure; ASTM D4541 Elcometer
Tear Strength	96.4 kN/m	550 pli	ASTM D412
Taber Abrasion, mg/1000 Cycles	25	25	CS17 WHEEL, 1kg per 1000 cycles; ASTM D4060



Mechanical Properties	Metric	English	Comments
Thermal Properties	Metric	English	Comments
Flash Point	>= 93.3 °C	>= 200 °F	ASTM Pensky-Martin

Processing Properties	Metric	English	Comments
Cure Time	0.267 - 0.583 min	0.00444 - 0.00972 hour	Tack Free Time
Gel Time	0.150 min	0.150 min	Fast
	0.3667 min	0.3667 min	Slow

Descriptive Properties	Value	Comments
Color	Most primary colors, including white.	
Flexibility	Pass	ASTM D1737, 1/8"Mandrel
Resistance to 1,1,1-Trichlorethane	Conditional	
Resistance to Acetic Acid (100%)	Recommended Conditional	
Resistance to Acetone	Recommended Conditional	
Resistance to Ammonium Hydroxide (50%)	Recommended	
Resistance to Benzene	Recommended Conditional	
Resistance to Brine-Saturated H2O	Recommended	Resistance to Brine-Saturated H ₂ 0 (310g/l)
Resistance to Chlorinated H2O	Recommended	
Resistance to Clorox® (10%) H20	Recommended	
Resistance to Diesel Fuel	Recommended Conditional	
Resistance to Gasoline	Recommended Conditional	
Resistance to Gasoline/ 5% Methanol	Recommended Conditional	
Resistance to Gasoline/5% MTBE	Recommended Conditional	
Resistance to H2O	Recommended	
Resistance to H2O (14 days at 82°C)	Recommended	
Resistance to Hydraulic Fluid (oil)	Recommended Conditional	
Resistance to Hydrochloric Acid (20%)	Recommended	



Resistance to Lactic Acid Recommended Conditional Resistance to MEK Recommended Conditional Resistance to Methylene chloride Conditional Resistance to Methylene chloride Recommended Conditional Resistance to Methylene chloride Recommended Conditional Resistance to Mineral Spirits Recommended Conditional Resistance to Mineral Spirits Recommended Conditional Resistance to Motor Oil Recommended Conditional Resistance to Muriatic Acid (10%) Recommended Resistance to Muriatic Acid (10%) Recommended Resistance to NacI/H2O (10%) Recommended Resistance to NacI/H2O (10%) Recommended Resistance to Phosphoric Acid (10%) Recommended Resistance to Phosphoric Acid (10%) Recommended Resistance to Phosphoric Acid (10%) Recommended Resistance to Potassium Hydroxide (10%) Recommended Conditional Resistance to Potassium Hydroxide (20%) Recommended Conditional Resistance to Propylene Carbonate Recommended Conditional Resistance to Sodium Bicarbonate Recommended Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sudium Hydroxide (25%) Recommended	Descriptive Properties	Secommended Value	Comments
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	Resistance to Toluene	Recommended	



Descriptive Properties # Phosphate	Value mended	Comments
Resistance to Vinegar/ H20 (5%)	Recommended	
Resistance to Xylene	Recommended Conditional	

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