

## **ACC SMP™ EP 1009 EPI Engineered Polymers Silicone Modified Polymer**

Category: Polymer, Adhesive, Thermoset, Methacrylate, Silicone

## **Material Notes:**

EP 1009, "Powered by Reactamine® Technology", is a two component 100% solid Silicone Modified Polyurea with superior performance in industrial applications. EP 1009 displays extremely fast cure times with excellent adhesions to different substrates. EP 1009 can be spray applied at temperatures ranging from 20°F to 150°F. EP 1009 has excellent chemical resistance, excellent water insensitivity to -40°F to 300°F. EP 1009 conforms to USDA and FDA guidelines for incidental food contact. Applications EP 1009 adheres well to several substrates including concrete, steel, and wood. Some typical uses include: SECONDARY CONTAINMENT WASTEWATER LAGOON AND POOL LININGS COATING POLYSTYRENE FOAM COLD STORAGE AREAS WASH BAY AND SHOWER LININGS COOLING TOWERS PETROCHEMICAL REFINERIES OILFIELD PIPELINE COATINGS WATER PROOFING SEWER LINERS MANHOLE RESTORATION INDUSTRIAL FLOORING BRIDGE COATINGSPart of the Amber Chemical Group. Data provided by manufacturer.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_ACC-SMP-EP-1009-EPI-Engineered-Polymers-Silicone-Modified-Polymer.php

Physical Properties	Metric	English	Comments
Viscosity	750 cP	750 cP	Side B
	800 cP	800 cP	Side A

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	60	60	ASTM D1737
Tensile Strength, Yield	29.5 MPa	4280 psi	ASTM D412
Elongation at Break	200 %	200 %	ASTM D412
100% Modulus	0.0152 GPa	2.20 ksi	ASTM D412
300% Modulus	0.0179 GPa	2.60 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	61.4 kN/m	350 pli	ASTM D2240
Taber Abrasion, mg/1000 Cycles	52	52	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 <sub>2</sub> 0 (310g/l)
Resistance to Chlorinated H2O	Recommended	
Resistance to Clorox® (10%) H2O	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	



Descriptive Properties (50%)	Naccommended Value	Comments
Resistance to Isopropyl Alcohol	Recommended	
Resistance to Lactic Acid	Recommended Conditional	
Resistance to MEK	Recommended Conditional	
Resistance to Methanol	Recommended	
Resistance to Methylene chloride	Conditional	
Resistance to Mineral Spirits	Recommended Conditional	
Resistance to Motor Oil	Recommended	
Resistance to MTEB	Conditional	
Resistance to Muriatic Acid (10%)	Recommended	
Resistance to NaCl/H2O (10%)	Recommended	
Resistance to Nitric Acid (50%)	Recommended	
Resistance to Phosphoric Acid (10%)	Recommended	
Resistance to Phosphoric Acid (50%)	Recommended	
Resistance to Potassium Hydroxide (10%)	Recommended	
Resistance to Potassium Hydroxide (20%)	Recommended, Discoloration	
Resistance to Propylene Carbonate	Recommended Conditional	
Resistance to Skydrol®	Conditional	
Resistance to Sodium Bicarbonate	Recommended	
Resistance to Sodium Hydroxide (25%)	Recommended	
Resistance to Sodium Hydroxide (50%)	Recommended	
Resistance to Sodium Hypochlorite (10%)	Recommended	
Resistance to Stearic Acid	Recommended	
Resistance to Sugar/H20	Recommended	
Resistance to Sulfuric Acid (>50%)	Recommended Conditional	
Resistance to Sulfuric Acid (10%)	Recommended	
Resistance to Toluene	Recommended	



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

## **Contact Songhan Plastic Technology Co.,Ltd.**

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