

## **ACC EP LCP EPI Engineered Polymers Aromatic Polyurea**

Category: Polymer, Thermoset

## **Material Notes:**

EP LCP Aromatic Polyurea, "Powered by Reactamine® Technology" is a two component 100% solid Polyurea (silicone optional) with superior performance in industrial applications. EP LCP displays extremely fast cure times with excellent adhesions to different substrates. EP LCP can be spray applied at temperatures ranging from 20°F to 150°F. EP LCP has excellent chemical resistance, excellent water insensitivity to -40°F to 220°F. EP LCP conforms to USDA and FDA guidelines for incidental food contact. Applications:EP LCP 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 BED LINERSPart of the Amber Chemical Group. Data provided by manufacturer.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_ACC-EP-LCP-EPI-Engineered-Polymers-Aromatic-Polyurea.php

Physical Properties	Metric	English	Comments
Viscosity	450 cP	450 cP	A Side
	650 cP	650 cP	B Side

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	90	90	ASTM D2240
Tensile Strength, Yield	20.3 MPa	2950 psi	ASTM D412
Elongation at Break	360 %	360 %	ASTM D412
100% Modulus	0.0155 GPa	2.25 ksi	ASTM D412
300% Modulus	0.0248 GPa	3.60 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	73.6 kN/m	420 pli	ASTM D412
Taber Abrasion, mg/1000 Cycles	35	35	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%)	Conditional	
Resistance to Acetone	Conditional	
Resistance to Ammonium Hydroxide (50%)	Recommended Conditional	
Resistance to Benzene	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 Conditional	
Resistance to Hydraulic Fluid (oil)	Recommended Conditional	
Resistance to Hydrochloric Acid (20%)	Recommended	



Resistance to Isopropyl Alcohol Resistance to MEK Resistance to MEK Resistance to MEK Resistance to Methylene chloride Resistance to Methylene chloride Resistance to Methylene chloride Resistance to Methylene chloride Resistance to Motor Oil Resistance to Mineral Spirits Recommended Conditional Resistance to Motor Oil Resistance to Mineral Spirits Recommended Conditional Resistance to Motor Oil 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 (50%) Recommended Resistance to Potassium Hydroxide Resistance to Potassium Hydroxide Resistance to Propylene Carbonate Resistance to Propylene Carbonate Resistance to Sodium Hydroxide (20%) Recommended Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sudium Hydroxide (50%) Recommended Resistance to Sudi	Descriptive Properties	Not Recommended Value	Comments
Resistance to MEK Resistance to Methanol Recommended Resistance to Methylene chloride Conditional Resistance to Mineral Spirits Recommended Resistance to Mineral Spirits Recommended Resistance to Motor Oil Resistance to MTEB Conditional Resistance to MTEB Conditional Resistance to MITEB Resistance to Muriatic Acid (10%) Recommended Resistance to NaCI/H2O (10%) Recommended Resistance to Nitric Acid (20%) Not Recommended Resistance to Nitric Acid (20%) Not Recommended Resistance to Phosphoric Acid (10%) Recommended Resistance to Phosphoric Acid (50%) Recommended Resistance to Potassium Hydroxide (20%) Resistance to Potassium Hydroxide (20%) Resistance to Potassium Hydroxide Resistance to Sodium Bicarbonate Recommended Resistance to Sodium Bicarbonate Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sudium Hydroxide (50%) Recommended	Resistance to Isopropyl Alcohol	Recommended	
Resistance to Methanol Recommended Resistance to Methylene chloride Conditional Resistance to Mineral Spirits Recommended Conditional Resistance to Motor Oil Recommended Resistance to Motor Oil Recommended Resistance to Muriatic Acid (10%) Recommended Resistance to Muriatic Acid (10%) Recommended Resistance to NaCl/H2O (10%) Recommended Resistance to Nitric Acid (20%) Not Recommended Resistance to Phosphoric Acid (10%) Recommended Resistance to Phosphoric Acid (50%) Not Recommended Resistance to Phosphoric Acid (50%) Not Recommended Resistance to Potassium Hydroxide Recommended Resistance to Potassium Hydroxide (20%) Recommended Conditional Resistance to Sodium Bicarbonate Recommended Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sudiuri Acid (50%) Recommended Resistance to Sudiuri Acid (50%) Recommended Resistance to Sudiuri Acid (50%) Recommended Resistance to Sudiuric Acid (50%) Recommended	Resistance to Lactic Acid	Recommended Conditional	
Resistance to Methylene chloride Recommended Conditional Resistance to Mineral Spirits Recommended Resistance to Motor Oil Recommended Resistance to MTEB Conditional Resistance to Muriatic Acid (10%) Recommended Resistance to Muriatic Acid (10%) Recommended Resistance to NatCl/H2O (10%) Recommended Resistance to Nitric Acid (20%) Not Recommended Resistance to Phosphoric Acid (10%) Recommended Resistance to Phosphoric Acid (50%) Not Recommended Resistance to Phosphoric Acid (50%) Not Recommended Resistance to Potassium Hydroxide Recommended (10%) Resistance to Potassium Hydroxide (20%) Recommended Conditional Resistance to Sodium Bicarbonate Recommended Resistance to Sodium Bicarbonate Recommended Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sudium Addium Hydroxide (50%) Recommended Resistance to Sudium Hydroxide (50%) Recommended Resistance to Sudium Addium Hydroxide Recommended Resistance to Sudium Hydroxide Recommended Resistance to Sudium Hydroxide Recommended Resistance to Sudium Hydroxide Recommended	Resistance to MEK	Recommended Conditional	
Resistance to Mineral Spirits Recommended Resistance to Motor Oil Recommended Resistance to Motor Oil Recommended Resistance to MTEB Conditional Resistance to Muriatic Acid (10%) Recommended Resistance to NaCI/H2O (10%) Recommended Resistance to Nitric Acid (20%) Not Recommended Resistance to Phosphoric Acid (10%) Recommended Resistance to Phosphoric Acid (50%) Not Recommended Resistance to Potassium Hydroxide (10%) Recommended Resistance to Potassium Hydroxide (20%) Recommended, Discoloration Resistance to Propylene Carbonate Recommended Resistance to Sodium Bicarbonate Recommended Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sudium Hydroxide (50%) Recommended	Resistance to Methanol	Recommended	
Resistance to Motor Oil Recommended Resistance to MTEB Conditional Resistance to Muriatic Acid (10%) Recommended Resistance to NatCl/H2O (10%) Recommended Resistance to Nitric Acid (20%) Not Recommended Resistance to Phosphoric Acid (10%) Recommended Resistance to Phosphoric Acid (50%) Not Recommended Resistance to Phosphoric Acid (50%) Not Recommended Resistance to Potassium Hydroxide (10%) Recommended Resistance to Potassium Hydroxide (20%) Recommended, Discoloration Resistance to Propylene Carbonate Recommended Conditional Resistance to Sigdrof® Conditional Resistance to Sodium Bicarbonate Recommended Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sudium Hydroxide (50%) Recommended	Resistance to Methylene chloride	Conditional	
Resistance to MTEB Conditional  Resistance to Muriatic Acid (10%) Recommended  Resistance to NaCl/H2O (10%) Recommended  Resistance to Nitric Acid (20%) Not Recommended  Resistance to Phosphoric Acid (10%) Recommended  Resistance to Phosphoric Acid (50%) Not Recommended  Resistance to Potassium Hydroxide (50%) Recommended  Resistance to Potassium Hydroxide (20%) Recommended  Resistance to Potassium Hydroxide (20%) Recommended  Resistance to Potassium Hydroxide (20%) Recommended (20%)  Resistance to Sodium Hydroxide (20%) Recommended (20%) Resistance to Sodium Bicarbonate Recommended (20%) Recommended  Resistance to Sodium Hydroxide (50%) Recommended  Resistance to Sodium Hydroxide (50%) Recommended (20%) Resistance to Sodium Hydroxide (50%) Recommended  Resistance to Sodium Hydroxide (50%) Recommended  Resistance to Sodium Hydroxide (50%) Recommended  Resistance to Sugar/H2O Recommended  Resistance to Sugar/H2O Recommended  Resistance to Sulfuric Acid (10%) Recommended Conditional  Resistance to Sulfuric Acid (10%) Recommended Conditional	Resistance to Mineral Spirits	Recommended Conditional	
Resistance to Muriatic Acid (10%) Recommended  Resistance to Nitric Acid (20%) Not Recommended  Resistance to Phosphoric Acid (10%) Recommended  Resistance to Phosphoric Acid (10%) Recommended  Resistance to Phosphoric Acid (50%) Not Recommended  Resistance to Potassium Hydroxide (10%) Recommended  Resistance to Potassium Hydroxide (10%) Recommended  Resistance to Potassium Hydroxide (20%) Recommended Conditional  Resistance to Sydrol® Conditional  Resistance to Sodium Bicarbonate Recommended  Resistance to Sodium Hydroxide (25%) Recommended  Resistance to Sodium Hydroxide (50%) Recommended  Resistance to Sudium Hydroxide (50%) Recommended	Resistance to Motor Oil	Recommended	
Resistance to NaCl/H2O (10%) Recommended  Resistance to Nitric Acid (20%) Not Recommended  Resistance to Phosphoric Acid (10%) Recommended  Resistance to Phosphoric Acid (50%) Not Recommended  Resistance to Potassium Hydroxide (10%) Recommended  Resistance to Potassium Hydroxide (20%) Recommended  Resistance to Potassium Hydroxide (20%) 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 Sudium Hydroxide (50%) Recommended  Resistance to Sudar/H2O Recommended  Resistance to Sudfuric Acid (10%) Recommended  Resistance to Sulfuric Acid (10%) Recommended	Resistance to MTEB	Conditional	
Resistance to Nitric Acid (20%) Resistance to Phosphoric Acid (10%) Resistance to Phosphoric Acid (10%) Resistance to Phosphoric Acid (50%) Resistance to Potassium Hydroxide (10%) Resistance to Potassium Hydroxide (20%) Resistance to Potassium Hydroxide (20%) Resistance to Propylene Carbonate Resistance to Skydrol® Conditional Resistance to Sodium Bicarbonate Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sudium Hydroxide (50%) Recommended	Resistance to Muriatic Acid (10%)	Recommended	
Resistance to Phosphoric Acid (10%) Recommended  Resistance to Phosphoric Acid (50%) Not 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 Hydroxide (50%) Recommended  Resistance to Sodium Hypochlorite (10%) Recommended  Resistance to Sudium Hypochlorite Recommended  Resistance to Sudifuric Acid (-50%) Recommended  Resistance to Sulfuric Acid (10%) Recommended	Resistance to NaCl/H2O (10%)	Recommended	
Resistance to Phosphoric Acid (50%) Resistance to Potassium Hydroxide (10%) Resistance to Potassium Hydroxide Recommended, Discoloration Resistance to Propylene Carbonate Resistance to Propylene Carbonate Resistance to Skydrol® Conditional Resistance to Sodium Bicarbonate Recommended Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sodium Hydroxide (50%) Recommended Resistance to Sudium Hydroxide (50%) Recommended Resistance to Sudium Hypochlorite (10%) Resistance to Sudium Hypochlorite Recommended Resistance to Sudium Hydroxide (50%) Recommended Resistance to Sudium Hypochlorite Recommended Resistance to Sudifuric Acid (>50%) Recommended Resistance to Sulfuric Acid (10%) Recommended	Resistance to Nitric Acid (20%)	Not Recommended	
Resistance to Potassium Hydroxide (10%) Resistance to Potassium Hydroxide (20%) 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 Sudium Hypochlorite (10%) Recommended Resistance to Stearic Acid Recommended Resistance to Sugar/H2O Recommended Resistance to Sulfuric Acid (-50%) Recommended Resistance to Sulfuric Acid (10%) Recommended	Resistance to Phosphoric Acid (10%)	Recommended	
Resistance to Potassium Hydroxide (20%)  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 Hydroxide (50%) Recommended  Resistance to Sodium Hyproxide (50%) Recommended  Resistance to Sodium Hyproxide (50%) Recommended  Resistance to Sudium Hyproxide (50%) Recommended	Resistance to Phosphoric Acid (50%)	Not Recommended	
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, Discoloration  Resistance to Sodium Hypochlorite (10%) Recommended  Resistance to Stearic Acid Recommended  Resistance to Sugar/H2O Recommended  Resistance to Sulfuric Acid (>50%) Recommended  Resistance to Sulfuric Acid (>50%) Recommended		Recommended	
Resistance to Skydrol® Conditional  Resistance to Sodium Bicarbonate Recommended  Resistance to Sodium Hydroxide (25%) Recommended  Resistance to Sodium Hydroxide (50%) Recommended, Discoloration  Resistance to Sodium Hypochlorite (10%) Recommended  Resistance to Stearic Acid Recommended  Resistance to Sugar/H2O Recommended  Resistance to Sulfuric Acid (>50%) Recommended Conditional  Resistance to Sulfuric Acid (10%) Recommended		Recommended, Discoloration	
Resistance to Sodium Bicarbonate Recommended  Resistance to Sodium Hydroxide (25%) Recommended  Resistance to Sodium Hydroxide (50%) Recommended, Discoloration  Resistance to Sodium Hypochlorite (10%) Recommended  Resistance to Stearic Acid Recommended  Resistance to Sugar/H2O Recommended  Resistance to Sulfuric Acid (>50%) Recommended  Resistance to Sulfuric Acid (10%) Recommended	Resistance to Propylene Carbonate	Recommended Conditional	
Resistance to Sodium Hydroxide (25%) Recommended Resistance to Sodium Hydroxide (50%) Recommended, Discoloration Resistance to Sodium Hypochlorite (10%) Resistance to Stearic Acid Recommended Resistance to Sugar/H20 Recommended Resistance to Sulfuric Acid (>50%) Recommended Resistance to Sulfuric Acid (10%) Recommended	Resistance to Skydrol®	Conditional	
Resistance to Sodium Hydroxide (50%) Recommended, Discoloration  Resistance to Sodium Hypochlorite (10%) Resistance to Stearic Acid Recommended  Resistance to Sugar/H2O Recommended  Resistance to Sulfuric Acid (>50%) Recommended Conditional  Resistance to Sulfuric Acid (10%) Recommended	Resistance to Sodium Bicarbonate	Recommended	
Resistance to Sodium Hypochlorite (10%)  Resistance to Stearic Acid Recommended  Resistance to Sugar/H2O Recommended  Resistance to Sulfuric Acid (>50%) Recommended Conditional  Resistance to Sulfuric Acid (10%) Recommended	Resistance to Sodium Hydroxide (25%)	Recommended	
Resistance to Stearic Acid Recommended  Resistance to Sugar/H2O Recommended  Resistance to Sulfuric Acid (>50%) Recommended Conditional  Resistance to Sulfuric Acid (10%) Recommended	Resistance to Sodium Hydroxide (50%)	Recommended, Discoloration	
Resistance to Sugar/H2O Recommended  Resistance to Sulfuric Acid (>50%) Recommended Conditional  Resistance to Sulfuric Acid (10%) Recommended		Recommended	
Resistance to Sulfuric Acid (>50%)  Recommended Conditional  Resistance to Sulfuric Acid (10%)  Recommended	Resistance to Stearic Acid	Recommended	
Resistance to Sulfuric Acid (10%)  Recommended	Resistance to Sugar/H2O	Recommended	
resistance to dunting Acid (10%)	Resistance to Sulfuric Acid (>50%)	Recommended Conditional	
Resistance to Toluene Recommended	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.**

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

Address: United North Road 215, Fengxian District, Shanghai City, China