

# ULTRA-FLEX™ EP-990

## CHEMICAL / CORROSION RESISTANT 100% SOLIDS EPOXY

ULTRA-FLEX™ EP-990 is a flexible 100% solids epoxy developed especially for applications where resistance to chemicals and cracking is required. ULTRA-FLEX™ EP-990 is highly effective against fuel oil, high end solvents, oxidizing chemical combinations and severe caustic and acidic environments. ULTRA-FLEX™ EP-990's flexibility provides resilience and resistance to cracking from substrate movement. Durable and highly abrasion resistant, ULTRA-FLEX™ EP-990 will withstand some of the harshest industrial environments. ULTRA-FLEX™ EP-990 has excellent adhesion to concrete as well as carbon steel surfaces and will fill cracks up to 1/8 inch.

Defend your equipment against corrosion and chemical attack and prolong working life of your operating units with ULTRA-FLEX™ EP-990.

Typical Industry Use		
Oil & Gas	Chemical	Pulp & Paper
Settling Ponds	Secondary Containment	Black, & Green Liquor Containment & Evaporators
Sulfur & Sulfuric Acid	Dissolving Tanks	Sulfur
GOSP units	Phosphoric & Sulfuric Acids	Chlorine & Chlorine Dioxide
Storage Tanks	Ethylene Dichloride	Sodium Hydroxide
	Acetone	Hydrogen Peroxide

PHYSICAL PROPERTIES	
CURE TIME	24-48 HOURS
POT LIFE	30 MINUTES
MIX RATIO	1:1
WEIGHT PER GALLON	9.5
PERCENT SOLIDS	100
SHORE D HARDNESS	>70
VOLATILE ORGANIC CONTENT	NONE



98 Main Street, PMB 418  
Tiburon, CA 94920

Phone: 415-435-7746  
Fax: 415-789-9502  
Url: [www.Lava-Liner.com](http://www.Lava-Liner.com)

Test	Description	Results
ATM G-8 (Modified)	Cathodic Disbondment 92 days @0-250°F -1.0V, 3% NaCl	Under 1mm/ small chips only, Pass
ASTM D 4541	Pull Force Adhesion—Ambient Environment Elkometer	1487 PSI
ASTM D 4541	Pull force Adhesion—Sub Sea Material applied & cured subsea	457 psi
ASTM 4060 CS	Taber Abrasion—17 wheel 1000g wt/1000 cycles No loss of adhesion.	Wt. Loss <181 mg.
ASTM D- 968	Falling Abrasive 20 mesh coal, 25,000 ml of abrasive across surface	Wt. Loss—Nil

ULTRA-FLEX™ EP-990 CHEMICAL RESISTANCE CHART				
CHEMICAL	CONCENTRATION	TEMPERATURE	DURATION	RESULT
Acetone		Ambient	200 days	Excellent
Aluminum chloride		Ambient	30 days	Excellent
Benzyl Chloride		125°F	365 days	Excellent
Caustic Solution		Ambient	365 days	Excellent
Distilled Water		212°F	306 days	Excellent
Exxon #25 Turbo Oil	100%	150°F	545 Days	Wt. Loss 2.56% Volume Gain 3.52%
Ethylene Dichloride	100%	Ambient	30 days	Excellent
Exxon #25 Turbo Oil	100%	Ambient	545 days	Wt. Loss 0.51%
HCL on concrete	12.5%	Ambient	365 Days	Excellent
HCL	10%	212°F	30 days	Excellent
HCL	20%	212°F	days	Excellent
Hydrofluoric Acid			Test 7000	Pass
Phosphoric Acid	85%	Ambient	90 days	Excellent
Salt Spray ASTM B 117	5% NaCL	95°F	1000 hours	Excellent
Sodium Chlorate	46%	220°F	30 days	Excellent
Sodium Chloride	5%	95°F	1000 hours	Excellent
Sodium Hydroxide	10%	212°F	366 days	Excellent
Sodium Hydroxide	12%	220°F	30 days	Excellent
Sulfuric Acid	1%	Ambient	30 days	Excellent
Sulfuric Acid	3%	Ambient	30 days	Excellent
Sulfuric Acid	20%	212°F	300 days	Excellent
Sulfuric Acid	50%	212°F	306 days	Excellent