

# ACI CHEMKOTE- LP 12

Two component Polyurea Protective
Coating

## TECHNICAL DATA SHEET

#### DESCRIPTION

ACI Chemkote- LP 12 is a two component, 1:2 Ratio 100% Polymer, solvent free, contains no fillers, fast set, liquid applied, polyurea liner system for metal, concrete, fiberglass and wood surfaces.

#### **FEATURES**

❖Chemical Resistant❖Tough and Elastomeric

♦ Class A- Fire Rating

❖Low Temperature Flexibility❖Abrasion and Impact Resistant

❖Low Pressure Application

#### TYPICAL USES

Bridge Decks and TunnelsCargo Liners & HoldsTraffic Areas

❖ Walkways❖ Mold Castings❖ Water

Underpasses

**❖**Seamless

❖High Build

Quick Drying

❖ Waterproof Below Grade Reservoirs

Encapsulation of Fiberglass Bodies and Polystyrene Foams

Secondary Containment Lining with or without Geo Textile

### **COLOR**

Grey or Black. Custom colors are available upon request.

## **PACKAGING**

15 gallon kit: 5 gallons Side-A and 10 gallons Side-B.

150 gallon kit: 50 gallons Side-A and 100 gal. Side-B.

### MIXING

ACI Chemkote- LP 12 may not be diluted under any circumstances. Thoroughly mix ACI Chemkote- LP 12 Side-B Base material with air driven power equipment until a homogeneous mixture and color is obtained.

Side-B base material must be thoroughly agitated until a homogenous mixture is obtained. Do not allow air to be incorporated into the product. Total suspension must be achieved. Side-A Isocyanate requires no mixing.

#### **COVERAGE**

ACI Chemkote- LP 12 may be applied at any rate to achieve desired thickness. Theoretical coverage per gallon is 1600 sq. ft. at 1 mil. (40 sq. ft. @ 1mm thick per gallon).

#### SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. All surfaces must be free of oil, grease, dirt and other contaminants.

**Steel/Metal:** All Grease, oil, wax, tar and other such similar residues should be removed. Abrasive blast using brush

blast technique or better to achieve 2-3 mil angular anchor profile.

In areas that cannot be accessed by power tools, surface preparation can be completed by hand using 80 or 100 grit sandpaper or a coarse scuffing pad such as Scotchbrite.

After sanding and scuffing the surface must be clean and dust free.

Concrete: Remove all contaminants such as oil, grease, dirt, form oil residue, wax or any other chemical product prior to proceeding with surface preparation. The surface should be free of voids, pot holes or bug holes, loose or weak concrete and the necessary surface profile must be achieved as listed below to ensure proper adhesion and good surface appearance.

Abrasive blast using brush blast technique or better to achieve 2-3 mil anchor profile.

Vacuum to remove dust, etc., prior to application of primer.

Use fiberglass (C-Veil Glass) or a geotextile cloth to bridge cracks over the primed surface.

Primer is always recommended to take care of voids, pot holes or bug holes etc.

## APPLICATION

Both Side-A and Side-B materials should be preconditioned at room temperature of about 75-80°F before application.

ACI Chemkote- LP 12 should be applied using a plural component, low pressure spray mixing equipment. The simple spray equipment can have a single motor driving two separate fixed ratio proportioning pumps. The Side-A Iso and Side-B Resin are pumped separately to a static mixing tube for air assisted or airless spray. It is recommended to use a 3/8" x 24 element mixing wand / Static spiral mixer for proper mixing.



## **STORAGE**

ACI Chemkote- LP 12 has a shelf life of 12 months from date of manufacture in original, factory sealed containers in shaded and well ventilated area.

Avoid exposure to freezing temperatures for an extended period of time.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Side-A and Side-B drums regularly.

#### LIMITATIONS

Due to its aromatic composition, *ACI Chemkote-LP 12* will tend to yellow or darken in color after exposure to UV light.

Do not open until ready to use.

Both Side-A and Side-B containers must be fitted with a desiccant device during use.

#### SERVICE TEMPERATURE

Coating can withstand a temperature ranging from -20°F to 200°F. Temperature of 200°F should not be exceeded under continuous exposure. Coating can withstand a short term 2-3 minutes of thermal load up to 350°F

## **TECHNICAL DATA**

 Mix Ratio, by volume
 1A:2B

 Pot Life.
 14-18 seconds

 Tack Free Time (@ 150 mils thickness)
 40-60 seconds

 Recoat Time
 6-12 hours

 Viscosity at 80°F (27°C), Brookfield:
 900-1000 cps

 Side-A
 900-900 cps

 Flash Point
 >200°F

PHYSICAL PROPERTIES	<u>CASTING</u>	<b>SPRAYING</b>
Specific Gravity (Side-A & B Combined)	1.05	1-1.05
Hardness, ASTM D-2240	$90 \pm 5$ Shore A	$82 \pm 3$ Shore A
Tensile, ASTM 412	2700-2900 psi (18-20Mpa)	1300-1600 psi (9-11 Mpa)
Elongation, ASTM 412-C	300-350%	300-350%
Tear, ASTM 624-C	200-225 pli	175-200 pli (37-39 KN/m)

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## **TECHNICAL SERVICE:**

Our Technical Service Department is available at any time to advise you in the correct use of this product or any other Ahlia products.

Note: The information presented herein is based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control.

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