

**Product
Bulletin**
AL-3000 P
Zero VOC 100% Solids Epoxy Primer System
GENERAL DESCRIPTION

AL-3000 P is an epoxy primer system to protect steel and metallic alloys in saline or aqueous environments. It is commonly used for coating water boxes, tube sheets, condensers, heat exchangers, circulating water pipes, pumps, and traveling water screens. *AL-3000 P* possesses anti-corrosion and corrosion inhibitive properties.

AL-3000 P when fully cured to the surface, disallows the corrosive effects of diffused water and salts at the primer/substrate interface when the unit is in service.

AL-3000 P offers enhanced cathodic protection per ASTM G-8 at 77°F and ASTM G-42 at 150°F.

AL-3000 P passes all laboratory tests designed to simulate the conditions present in condensers and heat exchangers.

APPLICATION

1. Mix the contents of each container prior to use.
2. *AL-3000* Base Component has a gel consistency to prevent filler settling. It reverts to a pourable liquid with agitation.
3. To 100 Parts of Base, Add 50 Parts of Activator.
4. Mix thoroughly.
5. Apply to surface. Typical coating is 20 mils.
6. Cure according to the cure schedule on Page 2.

SPECIFICATIONS
HANDLING CHARACTERISTICS

Catalyst Number:	<u>AL-3000 P Part B</u>
Mix Ratio, Catalyst to Resin, by Weight:	<u>2:1</u>
Workable Pot Life, 100 g @ 25°C:	<u>45 Minutes</u>
Mixed Viscosity @ 25°C cps:	<u>70,000</u>
Recommended Cure:	<u>See Page 2</u>
Color:	<u>Mint Green</u>

PHYSICAL CHARACTERISTICS

Hardness, Shore D:	<u>88</u>
Specific Gravity, 25°C / 25°C:	<u>1.5</u>

THERMAL CHARACTERISTICS

Operating Temperature Range, °C:

ELECTRICAL CHARACTERISTICS

Dielectric Strength, volts / mil:	<u>510</u>
-----------------------------------	------------

Permeability:

Water Vapor Transmission, @ 77°C, g/hr•m²

Typical, ASTM E-96: 0.00

Permeation, g/Pa•sec•m²

Typical: 0.00

Cathodic Protection

Typical, ASTM G-42 (150° F)

Zero (0) Holiday Enlargement

No Spontaneous Blistering

Typical, ASTM G-8 (77° F)

Zero (0) Holiday Enlargement

No Spontaneous Blistering

STORAGE AND HANDLING

Shelf Life is 2 Years in unopened containers.
 Store containers in a dry environment at 25°C.
 Mix containers thoroughly prior to removing contents.



Cure Schedule:

Overcoat Windows:

An Overcoat Window is a maximum time or upper limit that must be met for the subsequent applied layer to possess maximum inter-coat adhesion to the undercoat. An overcoat window is a function of coating chemistry, temperature and coating thickness. The overcoat window time is reduced as the temperature or coating thickness increase.

For a 20 mil thickness of AL-3000:

<u>TEMPERATURE</u>	<u>TIME</u>
50°F (10°C)	27 Hours
70°F (21°C)	15 Hours
90°F (32°C)	6 Hours
110°F (44°C)	3 Hours

To refresh a surface that has a recently expired overcoat, a quick solvent wipe with isopropyl alcohol, methyl ethyl ketone, acetone or trichloroethane, will render it bondable. For a violated overcoat window, a brush blasting will provide a suitable surface from which to adhere.