

## Description

Crest PPC-39 is a green liquid concentrate zinc phosphate that can be applied by immersion or flood systems to produce heavy, extremely fine grained zinc phosphate coatings on a wide variety of steel alloys. Coating weights from 1500 to 4500 milligrams/square foot can be easily obtained on most steels. When at normal temperatures, most steels will be zinc phosphated within 3 to 5 minutes.

The coatings exceed the American Petroleum Institute specifications for coating weights, but maintain a fine crystal structure that can hold oils and withstand handling. This ability to hold oils provides excellent anticorrosion properties that make this coating especially suitable for the harsh environments found in the oil field industry and provides anti-galling characteristics that are needed on threaded products.

The PPC-39 bath is easy to maintain and operate. The bath has a wide concentration range and high iron tolerance which helps extend the bath life and reduces maintenance.

## Advantages

- » No break-in treatment required.
- » Produces heavy, fine grained coatings on a wide variety of steels.
- » Has superior ability to hold rust inhibiting oils.
- » Bath is easy to control and maintain.
- » Excellent resistance to corrosion and galling.
- » Produces uniform coating weights.

## Specifications

This product meets or exceeds all qualifications for the following:

- » A-A-59267 Type Z
- » TT-C-490F Type I Class A

## Method of Use

### Application Methods

- » Immersion
- » Flood

### Mixing Instructions

- » For each 100 gallons of desired solution, add 85 to 94 gallons of water then add 6 to 15 gallons of PPC-39. This will result in a 6 to 15% solution.
- » Heat the tank to 160°F for 2 hours, mix well then increase to the normal operating temperature.

### Warranty and Liability Disclaimer

The above information and recommendations concerning this product are based upon our laboratory tests and field use experience; however, since conditions of actual use are beyond our control, any recommendations, or suggestions, are made without warranty, expressed or implied. Manufacturer's and seller's sole obligation shall be to replace that portion of the product shown to be defective. Neither shall be liable for any loss, damage or injury, direct or consequential, arising out of the use of this product.

**Adjustments**

- » Use the Total Acid Test and the Free Acid Test to verify that acid content is at the desired level. If the acid content is low, add 2 quart PPC-39 per 100 gallons of solution to raise the total acid content approximately 0.25 points.
- » Higher coating requirements may require steel wool to be added to the tank. If this is the case, dissolve ½ pound steel wool per 100 gallons of solution when the tank is at or below 160°F. Use the Ferrous Iron Test to verify that the iron content of the bath is between 4 to 15 ml.

**General Operating Parameters**

Concentration	6 to 15% by volume
Temperature (°F)	160° to 200°F
Time	6 to 30 minutes
Total Acid	6 to 15 ml of 1.0N NaOH = 6 to 15% 60 to 100 ml of 0.1N NaOH = 6 to 10%

**Equipment**

- » Tanks should be constructed of 316 stainless steel. 304 stainless steel or mild steel can be used as well.
- » Heaters may be either steam heated plate coils constructed of stainless steel, or gas fired burner tube types constructed of mild steel.
- » Other equipment such as heaters, pH meters, or electrodes should be made of steel when possible as PPC-36A will destroy glass.

**Caution**

Refer to product labels and Safety Data Sheets for precautionary and handling information.

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