

## Description

Crest PCC-80 was developed as an economical yellow chromate for zinc and cadmium plating. It can be used on cyanide, chloride, and alkaline non-cyanide zinc to produce a sealer that will not have white corrosion in a salt spray until after 178 hours. All types of cadmium plating need this type of product to ensure good salt spray protection.

PCC-80 is a one component solution that is mixed with water to produce a golden color and a corrosion protection film on all parts in a few seconds. It will produce a dark yellow finish at 2 to 3% by volume on zinc die cast, hot dip galvanize, or zinc plate. A light yellow color can be put on parts at a lower concentration if that is important. A final bleach solution will give the parts a bright blue finish.

- » The solution is a dark yellow color.
- » This product completely soluble in water.
- » Non-corrosive to the above metals when used as directed.
- » **Energy saving:** This product is used at room temperatures, and will produce a yellow chromate finish that provides outstanding corrosion protection at a very low cost.

## Methods of Use

### Application Methods

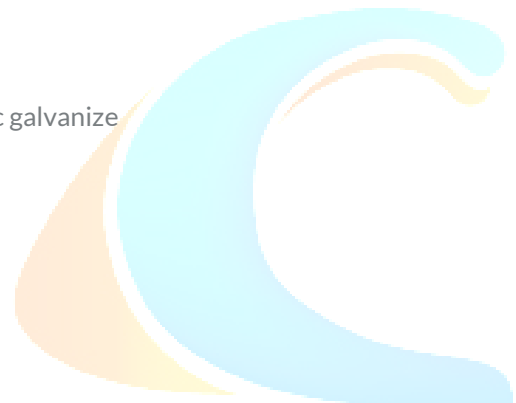
- » Immersion

### Mixing/Application Instructions

- » Zinc Plate, Cadmium Plate, Zinc Die Cast, Hot-Dip Galvanize, and Zinc Peen Plate (MIX #1)
  - » **Characteristics**
    - » Color: light to dark yellow
    - » Salt Spray Resistance: On non-cyanide alkaline zinc plating – 178 hours to white corrosion.
  - » **Operation Specifications**
    - » Concentration
      - » Alkaline Plating: 1.25-3% by volume
      - » Acid Zinc Plating: 9.5-12.5% by volume
    - » Solution Temperature: Room temperature, with 90F as a maximum
    - » Solution pH: 0.7-1.5
    - » Immersion Time: 10-30 seconds maximum
  - » **Application**
    - » Zinc Plating or Cadmium Plating
      - » 0.25% Nitric Acid dip to extend the PCC-80 tank
      - » Cold overflowing water
      - » PCC-80 (MIX #1)
      - » Cold water rinse: contains chrome
      - » Dry at a temperature below 140°F
    - » Zinc Die Cast
      - » Alkaline Cleaner (like Crest PAC-42A) for zinc die cast
      - » Cold overflowing rinse water



- » Sulfuric acid dip (1-2% by volume) at room temperature for 10-20 seconds
- » Cold overflowing rinse water
- » PCC-80 (MIX #1)
- » Cold water rinse-contains chrome
- » Dry at a temperature below 140°F
- » Hot-Dipped Galvanize
  - » Alkaline Cleaner (like Crest PAC-42A) for zinc galvanize
  - » Cold overflowing water
  - » PCC-80 (MIX #1)
  - » Cold rinse water-contains chrome
  - » Dry at a temperature below 140°F
- » Zinc Plate, Cadmium Plate, Hot-Dip Galvanized Steel (MIX #2)
  - » **Characteristics**
    - » Color: Iridescent light yellow (with a bleach dip will produce a clear light blue finish on zinc plating)
    - » Salt Spray Resistance
    - » Iridescent Light Yellow: 140 hours
    - » Bleached Bright Blue: 78 hours
  - » **Operating Specifications**
    - » Concentration: 20-24% by volume
    - » Solution Temperature: Room temperature, with 90°F as a maximum
    - » Solution pH: 0.05-0.5
    - » Immersion time: 5-20 seconds
  - » **Application**
    - » Zinc Plating
      - » 9.25% Nitric acid dip to extend tank life of the PCC-80
      - » Cold overflowing water
      - » PCC-80 (MIX #2)
      - » Cold water-contains chrome
      - » Optional bleach dip for 1 minute
      - » Rinse water
      - » Dry below 140°F
    - » Cadmium Plating o Cold Water
      - » PCC-80 (MIX #2)
      - » Cold water-contains chrome
      - » Dry below 140°F
    - » Hot-Dipped Galvanize
      - » Alkaline Cleaner (like Crest PAC-42A) for Zinc galvanize
      - » Cold overflowing water
      - » PCC-80 (MIX #2)
      - » Cold water-contains chrome
      - » Dry below 140°F



### Equipment

- » Use plastic or stainless steel tanks

### Problems in Plating

- » **Zinc and Cadmium plating**
  - » Final appearance of the Crest PCC-80 chromate film depends on the metal smoothness and the quality of the plate deposit. A minimum plating thickness of 0.0002 inches produces good results, but a slightly higher thickness increases corrosion results.
  - » Make sure that the parts are rinsed well to make sure that no alkaline cleaner is carried into the PCC-80 solution.
- » **Zinc Die Cast**
  - » Cleaning is the most important step in getting a good chromate coating on the zinc die cast.
  - » Make sure that the parts are rinsed well to make sure that no alkaline cleaner is carried into the PCC-80 solution.

### Caution

Contains acid compounds and may cause burns. Exercise caution in the use of this product. Avoid contact with skin, eyes and clothing. Refer to product labels and Safety Data Sheets for precautionary and handling information.

### 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.