



# **BRITEGUARD™ TRIDIP™ CR-3**

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- **Uniform blue-bright finish.**
- **Operates at lower concentrations.**
- **Outstanding bath life.**
- **Less strip back.**
- **No hexavalent chromium.**
- **Easier to waste treat.**
- **Provides in excess of 100 hours salt spray to white corrosion.**
- **RoHS compliant.**

## **RoHS COMPLIANT HIGH CORROSION RESISTANT TRIVALENT CHROMATE**

*TRIDIP CR-3* is a specially formulated one component liquid trivalent chromate conversion coating for cyanide, alkaline non-cyanide, chloride, zinc/iron and zinc/cobalt electrodeposited zinc surfaces. It brightens and passivates most zinc surfaces leaving a pronounced blue hue. Its unique properties make it receptive to a variety of post-treatments.

*TRIDIP CR-3* is a chrome VI-free, single-dip process that does not require additions of nitric acid. Periodic additions and infrequent dumping allows heavy production without downtime for fresh make-up or without interruption of chromate quality.

*TRIDIP CR-3*, when properly applied, provides a finish that produces less than 5% white salts after 100 hours of neutral salt spray. However since the degree of protection is very dependent upon the surface of the base metal plated, results will vary from installation to installation.

*TRIDIP CR-3*, when used in conjunction with *BRITEGUARD RP-81* or *89*, provides an even higher corrosion resistance conversion coating. However since the degree of protection is very dependent upon the surface of the base metal plated, results will vary from installation to installation.

*TRIDIP CR-3* produces a deposit that is compliant with ELV (automotive), RoHS (electronics) and WEEE (electronics).

## **OPERATING DATA**

	<u>Range</u>	<u>Optimum</u>
<b>TRIDIP CR-3</b>	<b>2-8%/vol.*</b>	<b>5%/vol.</b>
Temperature	70-90° F. (32-32° C)	90° F (32° C)
pH	1.6 - 2.5	1.8 - 2.0
Time	5-45 sec	10-15 sec
Agitation	Mild air	Mild air

### **EQUIPMENT**

PVC, Koroseal, lined steel, plastic, polyethylene, or polypropylene tanks. Heating coils of teflon are recommended.

### **VARIABLES**

When adjusting for proper color, polish or troubleshooting, it is important to recognize that the following variables will have some effect on the overall performance of the conversion coating: \*Concentration. \*Bath pH. \*Immersion time. \*Drying temperature. \*Agitation. \*Quality of plated finish. \*Load size. \*Rinsing. \*Age of solution. \*Plate thickness(0.2-0.3 mls). Any one of these or a combination of several can make a difference in the performance of the product.

### **PROCESS NOTES**

- Plate thickness of 0.2-0.3 mls is required for optimum results .
- Lower pH with additions of **TRIDIP CR-3** not acid.
- All chromate films are soft when wet and should not be abraded or handled. Coatings offer the maximum corrosion resistance and hardness in about two to three days. Drying is best done by warm (not hot) air or centrifugal dryer.
- A 0.25-0.5% by vol. of nitric or sulfuric acid dip should be used prior to chromating to remove organic filming due to high brightener or bath organic contamination. This will insure the proper adhesion of the film and brighten the surface.
- Tank should be checked once per shift to remove parts that have fallen off racks during processing. The chromate solution will continue to react on the parts and introduce iron thus contribute to shorter bath life, yellow deposits and higher costs.
- The appearance and corrosion resistance of the chromate film depend upon many factors in both the chromate itself and the plating bath. Another important factor is the rinsing between the plating bath and the chromate. Following the suggestions in this literature will help to insure maximum performance.

### **STORAGE/HANDLING**

**TRIDIP CR-3** is a industrial chemical. Avoid storing with combustible materials. Keep containers closed when not in use. **TRIDIP CR-3** solutions require the handling of chrome bearing compounds. Avoid contact with skin and eyes. Wear proper protective clothing and safety gear. **Refer to the Material Safety Data Sheet for more complete information before using this product.**

### **WARRANTY**

The information presented herein, while not guaranteed, is to the best of our knowledge true and accurate. No warranty or guarantee expressed or implied is made regarding the performance of any products, since the manner of use is beyond our control. No suggestion for product use nor anything contained herein, shall be construed as a recommendation for its use in infringement of any existing patent, and we assume no responsibility or liability for operations which do infringe any such patents. The above includes confidential and proprietary information of **A BRITE** and is furnished to you for your use solely on products or processes supplied to you by us.