# CR-3 Reducer Improves Impurity Removal In Chrome Baths

## **Description**

Cr-3 Reducer improves the removal rate of chloride, trivalent, iron, copper, nickel and other metals in chrome baths. It is designed to work with Porous Pots, Dummying, Ion Exchange and ED Membranes. CR-3 increases both the ionic efficiency and conductivity so the purification treatment is faster and more complete.

Maintaining a less contaminated bath has many benefits. This reduces pitting, burning, and roughness while also improving hardness, crack structure and throwing power. A purer bath drastically lowers costs due to significant energy savings and faster plating speeds.

Add CR-3 Reducer any time a chrome bath is being purified, particularly with Porous Pots.

- Speeds The Removal Rate Of All Contaminants.
- Works With Any Type Of Hexavalent Chrome Bath.
- Used With Porous Pots, Dummying, Ion Exchange and Membranes.
- Improves Either Periodic Or Continuous Treatments.
- Easy To Add, Easy To Use and Easy To Control.

#### **Product Usage**

CR-3 Reducer is a liquid so it is easy to handle. It is used at only 1-2% by volume in the bath. A 1.5% by volume addition is optimum, or 15 gallons in a 1,000 gallon tank. Maintenance adds are not normally needed for short treatment times of up to 24 hours. For longer, extended or continuous purification it is best to add an additional 1/2 gallon for every 100,000 amp. hours of operation.

#### **Regulations**

Like all chrome plating solutions, the Dura bath produces misting and this can be reduced if lower chrome levels are used. This mist contains Cr(VI) which is regulated by the EPA for environmental and OSHA for worker safety issues. Be sure to follow all federal, state and local regulations for safe operation and hazardous disposal.

### Caution

The Dura bath contains chromic acid, sulfuric acid and the various Dura additives outlined above. These are all industrial chemicals and must be handled carefully and in accordance with the directives provided in the individual SDS forms.

Read and understand the SDS on all of these chemicals before handling or using. Ensure that all regulatory standards are followed and limit personal exposure as required for Cr(VI) by OSHA.

Avoid personal contact with these chemicals, avoid splashing and avoid breathing any fumes released during operation. Do not inhale any dust, mist or vapors from these chemicals. Do not allow these products to contact the skin or eyes. In case of contact, flush immediately with large amounts of fresh water and seek immediate medical attention.

Wear protective clothing such as aprons, gloves, face masks and respirators. Be sure that adequate eyewashes and emergency showers are available nearby before handling or using any of these chemicals.

Designated work clothing should be worn while using these chemicals and the worker(s) should thoroughly shower and change into fresh-clean street clothing before going home. Decontaminate all work clothing before reuse.

The user is responsible for providing adequate work clothing, personal protection, limiting personal exposure, and providing any required clean-up, decontamination as well as any needed medical attention.