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# 560 BLACK HEXAVALENT CHROMATE CONVERSION COATING FOR ZINC

**ACCU-LABS 560** is a two part liquid concentrate which when diluted with water will produce a glossy, jet black chromate conversion coating on all types of zinc plated parts.

**ACCU-LABS 560** provides an excellent base for subsequent paint, lacquer, or enamel finishes. **ACCU-LABS 560** coatings give superior corrosion protection up to 96 hours of salt spray to white rust per ASTM B 117.

## **BENEFITS**

- 1. Excellent appearance and corrosion protection
- 2. Operates at room temperature
- 3. Blackens in about one minute
- 4. Wide operating range and long solution life

## **SOLUTION MAKE UP:**

The **ACCU-LABS 560** BATH IS PREPARED BY MIXING:

**ACCU-LABS 560-M** 20% by volume with DI Water **ACCU-LABS 560-B** 8% by volume by volume with DI Water Deionized Water to final volume

**ACCU-LABS 560** baths may be prepared using low chloride tap water; however, deionized water will increase the bath life and should be used when available. **Use 560-M** for fresh solution make up only.

## **OPERATING GUIDELINES:**

Immersion Time 45 Sec - 90 Sec Bath pH 1.0 - 1.9 Bath Operating Temp 70 - 90°F

## PROCESSING GUIDELINES:

- 1. Zinc Plate 0.0002" min. Thickness
- 2. Cold Water Rinse
- 3. Sulfuric Acid Dip 1%, 5-10 seconds
- 4. Cold Water Rinse
- 5. **ACCU-LABS 560** Black Chromate
- 6. Cold Water Rinse
- 7. Dry 140°F Maximum

## **MAINTENANCE:**

**ACCU-LABS 560** Black Chromating solutions are depleted only upon usage and by drag-in and drag-out. During use, the pH of the solution tends to rise. The pH of the bath may be measured with a standard pH meter. The pH is adjusted by additions of both 1% **560-A** and 1% **560-B**, until the pH is lowered to the operating range.

If the bath becomes unbalanced or contaminated, make corrections as follows:

- 1. Iridescent Coating: This is caused by too slow a bath action and may be corrected by:
  - **a.** Lowering the pH. Use **560-A** additions.
  - b. Increasing the bath dipping time.
- 2. Olive Drab or Brown Color. This is a contamination condition caused by excessive drag-in of chlorides, cyanides, or nitrates from prior dips or the plating bath. When this condition occurs, the bath may be corrected as follows:
  - a. Determine pH of the bath and adjust the pH to within the range.
  - If an acceptable black is not produced, make additions of ACCU-LABS 560-B until the desired color is obtained.

# **EQUIPMENT:**

ACCU-LABS solution may be contained in standard acid resisting materials such as polyethylene or polypropylene tanks, Koroseal or PVC lined tanks or 316 stainless steel lined tanks. Dipping baskets and racks should be plastic or stainless steel.

# **CAUTION:**

**ACCU-LABS 560** solutions contain chromates and are acid in nature. In case of contact, flush the contaminated area with a large volume of water. When handling **ACCU-LABS 560** solutions, personal protective gear and eye shields should be worn.

## **DISCLAIMER:**

THE INFORMATION CONTAINED IN THIS BULLETIN IS, TO OUR BEST KNOWLEDGE, TRUE AND ACCURATE, BUT ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL. ACCU-LABS INC. DISCLAIMS ANY LIABILITY INCURRED IN CONNECTION WITH THE USE OF THESE DATA OR SUGGESTIONS.