Triple-S Chemical Products, Inc.



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# **BLACK - AL** For Blackening Aluminum

## **DESCRIPTION:**

**Black-** AL is a rapid acting chemical conversion liquid compound for blackening aluminum and aluminum dicasts parts by immersion at room temperature. The product is a mildly acidic solution containing no Chromates, Sulfides, Cyanides, Caustic or Phenols.

### **PREPARATION:**

Parts must be free of grease, alkalinity or acid when **Black AL** is applied. Parts must be thoroughly cleaned and deoxidized prior to blackening. **Cleaner 104** is recommended for removing heavy oils and oxidation. Do not use petroleum-degreasing solvents that leave a residue on the surface. Rinse thoroughly with over flowing cold water to remove residual cleaners and dust. It is important that alkaline cleaners are completely rinsed off prior to blackening.

**IMPORTANT:** Triple- S does **NOT** recommend using any sort of alcohol, solvent, acid or degreaser to clean parts prior to solution application. **Cleaner 104** is a great cleaner to ready parts for **Black AL** or even powdered cleaners such as **Ajax** or **Comet** can also be used. Use the cleaner in conjunction with a scotch brite pad and apply medium strength scrubbing to prepare the part then thoroughly rinse with fresh water. **Cleaner 104** run off should be contained and disposed of as per local hazmat disposal laws.

### **APPLICATION:**

Use an acid resistant container for the immersion tank. Plastic, plastic lined, glass or rubber lined tanks are suitable. Do not use an uncoated or bare metal container. **Black- AL** should be diluted with equal volume parts of water (50% to 50% of water by volume). Determined by test usually a period of 10 to 60 seconds is needed to produce a uniform black finish. The immersion time can be shortened by using a stronger solution or lengthened by using a weaker solution.

Deoxidizer: Use **238-** L Deoxidizer to deoxidize the aluminum parts. Then, rinse parts with cold water. Immerse parts in **Black -AL** solution for 10 to 60 seconds. Agitate the parts to break air bubbles and to assure solution contact with all surfaces. Plastic or plastic lined baskets should be used for small parts.

Rinse thoroughly with over flowing cold water to stop the chemical reaction and towel dry. Then seal with a top coat such as **WSL-55**, **Trilac 747**, or **AL-70**. Parts can be immersed in water soluble lacquer while still wet from the preceding rinse, or can be sprayed or sealed. The **Black- AL** finish in itself imparts very little to no corrosion resistance to the Aluminum surface. However, its crystalline structure is porous and will absorb the sealant or lacquer, promoting long-term corrosion resistance.

## TROUBLE SHOOTING:

A non-adherent, spotty black finish indicates improper cleaning and deoxidizing or poor rinsing. Good rinsing is essential for long life of **Black- AL**.

### **SOLUTION CONTROL:**

The blackening process with **Black- AL** is a chemical reaction between the solution and metal surface. Chemical activity is gradually diminished as the solution is used but may be restored to the desired strength by adding fresh concentrate. When immersion time necessary to produce the desired black is increased, add sufficient concentrate to reduce immersion time to your previous standard. Keep a record of additions to establish a bath history.

## **CAUTION:**

Avoid contact with skin or eyes. Contact with skin or eyes may cause irritation and/or burning sensation. Protective clothing, rubber gloves and a face shield should be worn when handling.

## FIRST AID:

In case of skin contact, wash skin with large amounts of fresh water. In case of eye contact flush immediately with large amount of fresh water for at least 15 minutes and *Call a Physician Immediately!* 

#### **DISPOSAL**:

Contaminated product soil, water container residues and spill clean-up materials may be hazardous wastes. Avoid contact with water. Comply with local, state and federal regulations concerning solid or hazardous waste disposal and or container disposal.

The information stated herein is based on information and tests we believe to be reliable. The accuracy or completeness thereof is not guaranteed. Since conditions of use are outside our control, user shall, before using, determine the suitability of the product for his intended use and user assumes all risk and liability in connection therewith.