

Alum Prep

Alum Prep is an acidic liquid, used in conjunction with Descaler D to develop a controlled etch on all types of cast aluminum alloys. The Alum Prep /Descaler D combination will etch and de-smut cast aluminum alloys in one operation - no subsequent de-smutting is required.

The Alum Prep/Descaler D combination, conditions the aluminum casting surface in preparation for immersion zincate, chromate conversion coating, and anodizing. Alum Prep/Descaler D combination may also be used on wrought aluminum alloys where an extremely fine etch is required.

Note: all work must be alkaline pre-cleaned before processing in the Alum Prep/Descaler D solution.

Features & Benefits

Use at room temperature	Low energy cost
Fast action	Higher productivity
Versatile	Effective on wrought and cast substrates; small inventory footprint
One step etch/ de-smut	Shorter process cycle; higher productivity

Typical Applications

- Anodizing lines
- Pre-treatment of aluminum castings and wrought aluminum prior to zincate and chromate coating.

Operating Conditions

Installations where large volumes of work are processed through the Alum Prep/ Descaler D solution it will be necessary to cool the solution to maintain the 70°F to 90°F. temperature range.

Concentration of alum prep	Used as received-full strength
Concentration of descaler d	4 – 8oz/Gal
Operating temperature	70°F – 90°F
Immersion time	30 sec – 6 min
Equipment	Tanks, racks, cooling coils and other related equipment should be constructed of Polyethylene, Polypropylene or similar materials.
Ventilation	Required

Typical process cycle

1. Alkaline soak clean*, 160°F to 180°F.
2. Cold water rinse.
3. 30 second to 6 minutes in a solution of Alum Prep/ Descaler D at 70°F to 90°F.
4. Cold water rinse.
5. Zincate, chromate or anodize.

*Consult with your Hubbard-Hall technical representative or technical service group for the best Recommendation for your application.

Note: Descaler D product code is 2541010

Waste Disposal

Neutralize Alum Prep to a pH of between 6.0 to 8.0 with soda ash, lime or caustic soda. The caustic soda, soda ash and lime should first be dissolved in water before adding to the Alum Prep solution. Add the alkaline solution slowly since neutralization generates heat. After the Alum Prep solution's pH has been adjusted to 6 to 8 allow solution to stand for 30 minutes to 1 hour, to allow time for the precipitation of metallic salts. After the standing period, decant the liquid portion off into a settling tank.

The precipitated metallic salts should be treated as hazardous waste.

Consult local and state environmental regulatory authorities for permitting requirement.

Caution

Alum Prep is a mixture of concentrated acids and the normal safety precautions for handling such acids apply. Avoid skin, eye and oral contact. Wear protective clothing, gloves and goggles when handling the product. Flush exposed areas immediately with clean, cold water. Contact a doctor immediately in case of injury.

WARRANTY: THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.

Our People. Your Problem Solvers.

For more information on this process,
please call us at 203.756.5521 or email: techservice@hubbardhall.com

Hubbard-Hall holds certifications for **ISO 9001:2015**, Responsible Distribution, as accredited by the **ACD** (Alliance for Chemical Distributors) and as a **Women-Owned Small Business**, as well as maintaining an association with **Omni-Chem**¹³⁶.