



Aquaease® ACLF #3

Aquaease ACLF #3 is an acid cleaner and deoxidizer for aluminum, copper alloys, steel, and stainless-steel surfaces. It contains a blend of inorganic acids, surfactants, and solvents to remove heavy soils quickly and effectively. It may also be used to descale steel surfaces.

Aquaease ACLF #3 is extremely free rinsing and may be used in soak or spray applications. It is safe when used as directed. All surfactants used in Aquaease ACLF #3 are biodegradable.

Features & Benefits

Combination cleaner/deoxidizer	Removes heavy soils
Biodegradable surfactants	Easy to use liquid

Typical Applications

- Job shops that have aluminum or stainless-steel parts
- On site truck washes for brightening aluminum
- Difficult to treat parts with heavy scale or oxide that needs to be removed
- Effective prior to conversion coating, anodizing, painting, and plating processes

Operating Conditions

Spray	1 – 5% by vol
Soak	5 – 25% by vol
Time	30 sec. – 10 min

In spray applications always work from bottom up on cleaning and rinsing operations. Do not allow product to dry on work surface. Aquaease ACLF #3 will etch glass, especially if allowed to dry. Do not use this product on chrome, tin, zinc, galvanized or magnesium.

Equipment

Plastic containers must be used. Tanks should be vented.



Control procedure

Equipment

- 10 mL Graduate Cylinder
- 125 mL Disposal Beaker
- 2 oz Dropping bottle Phenolphthalein Indicator
- 1.0 N Sodium Hydroxide

Procedure

1. Transfer 10 mL of the Aquaease ACLF #3 solution to the 125 mL beaker with the graduate cylinder.
2. Add 10 mL of tap water to the beaker.
3. Add 5 to 8 drops of the Phenolphthalein Indicator to the beaker.
4. While swirling the solution in the beaker, add the 1.0N Sodium Hydroxide until the solution turns pink.

Calculation

% by volume Aquaease ACLF #3 = 0.89 x mL of 1.0N Sodium Hydroxide.

Caution

Strong acid. Avoid contact with skin or eyes. Not to be taken internally.

Read and understand OSHA safety data sheet prior to using or working with this product. People handling and working with this product should be properly trained in safe handling of corrosive liquid acids. Eye wash and safety shower should be readily accessible in areas in which this product is used, handled, and stored.



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.