



Better Chemistry. **Better Business.**

Aquaease™ SAL

Product Code: 2052052
Revised Date: 02/03/2012

Aquaease™ SAL

DESCRIPTION

Aquaease™ SAL is a liquid soak cleaner for aluminum alloys, which contains a unique blend of biodegradable surfactants and a mild inhibited acid. **Aquaease™ SAL** is also an excellent cleaner / burnishing compound for use in vibratory finishing mills or “part on part” tumbling barrels.

Aquaease™ SAL will not etch polished aluminum when used as recommended in “Operating Parameters” below.

FEATURES AND BENEFITS

- Silicate free
- Mildly acidic, pH approximately 5.0
- Non-etching
- Biodegradable
- Good detergency
- Free rinsing
- Easily waste treated
- May be used on brass and copper
- Good ultrasonic cleaner
- Keeps mass finishing media clean



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TYPICAL APPLICATIONS

- Soak cleaner in anodizing lines
- Soak cleaner in phosphate lines
- Soak cleaner prior to chromate or non-chrome conversion coating
- Tumble barrel cleaning / de-burring / burnishing
- Vibratory cleaning, burnishing, and de-burring
- Buffing compound removal
- Soak cleaning prior to plating

PHYSICAL DATA

Specific Gravity1.06
 Solubility in water complete
 Appearancepale yellow liquid
 pH (conc.)4.8 – 5.2

OPERATING PARAMETERS

SOAK OR AGE-DIP OPERATIONS

Concentration:.....5 TO 10% (vol.)
 Temperatures:.....160 – 200 F
 Time:.....3-7 minutes
 pH:.....5.0 – 5.5

Agitation of work or solution is beneficial. Optimum operating parameters are 7.5% volume, 180 F, for five minutes at a pH of 5.25.

Equipment: Tanks may be fabricated with stainless steel, or lined mild steel.



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Heaters: Stainless steel or Teflon heating coils recommended.

SOLUTION CONTROLS

PROCEDURE ONE (Titration method)

1. Pipette 25.0 ml of the cleaning solution a 250 ml Erlenmeyer flask and add 75 ml of deionized water.
2. Add five drops of phenolphthalein indicator to the flask and swirl to mix.
3. Titrate solution with 0.1 N NaOH solution to a slight pink endpoint.
4. Record the amount of 0.1 N NaOH used.
5. Calculate the percent strength of cleaner by volume using the equation below.

$$\text{Concentration (\% vol.)} = 0.87 \times \text{Number ml's 0.1 N NaOH solution}$$

PROCEDURE TWO (Refractometer method)

1. Simply add a few drops of cleaning solution on to the refractometer and read the value from the scale.

| <u>% by volume Aquaease™ SAL</u> | <u>Refractometer Reading</u> |
|----------------------------------|------------------------------|
| 5% | 1.5 |
| 10% | 3.0 |

PROCEDURE THREE (Test Kit Method)

1. Measure 10 mls. of the cleaning solution into the 125 ml Erlenmeyer flask and add 50 mls. of deionized water.
2. Add 5 drops of phenolphthalein indicator to the flask and swirl to mix the contents of the flask.
3. Titrate with the N-72 solution by counting the number of drops required for a color change from yellow to pink. The flask should be swirled while the N-72 solution is being added.
4. Record the number of drops of the N-72 solution used.
5. Calculate the percent by volume Aquaease SAL in solution by the following equation:



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Concentration (% by vol.) = .59 x number of drops of N-72 solution

CAUTION

Even though **Aquaease™ SAL** is a mildly acidic liquid; wear protective clothing and goggles when handling this product. If exposed, flush thoroughly with clear, cold water. Always read the Material Safety Data Sheet to ensure familiarity with the methods of safe handling and the health hazards associated with the product. In case of injury contact a doctor.

WASTE DISPOSAL

Discharge rinse water and spent solutions to a permitted disposal system. In order to be completely informed on the latest regulations for your area, please contact the local authorities.

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.