



Aquaease™ SL 13

Product Code: 2051001
Revised Date: 3/2/2016

Aquaease™ SL 13

DESCRIPTION

Aquaease™ SL 13 is a liquid, alkaline, phosphate free and chelating agent free product which may be used as a soak cleaner or as a soak-electro cleaner for cleaning ferrous metals, copper, copper alloys, copper laminate, and zinc die casting. It is an economical heavy-duty soak cleaner formulated to remove fabrication oils, lubricants, and light deposits of buffing compound from ferrous metals, copper, brass, magnesium alloys and zinc die castings. It may also be used to remove chromate coatings and fingerprints from printed circuit boards. **Aquaease™ SL 13** may be adapted into operations which, because of space, are limited to a brief cleaning line; for example (1) soak, soak-electro or (2) soak-electro.

FEATURES AND BENEFITS

- No phosphates
- No chelating agents
- Can be used as a single tank soak electro cleaner
- High conductivity
- Used on a wide range of metal substrates
- High detergency
- Controlled foam

TYPICAL APPLICATIONS

- Soak cleaner in plating lines
- Electro cleaner in plating lines
- Combination soak / electro clean in plating lines



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PHYSICAL DATA

Specific gravity..... 1.211
Solubility in waterinfinite
Appearance and odor.....clear, pale yellow liquid

OPERATING CONDITIONS AS A SOAK CLEANER OR SOAK-ELECTRO

Concentrations:..... 4 to 12% by volume
Temperature: 130 to 200°F (54 to 93°C)
Operate at 120 to 135°F (49-57°C) when processing zinc die-casting, brass alloys, and copper laminate
Time:..... 1 to 5 minutes
Current density:... 20 to 50 amps/sq. ft (2.0 to 5.0 mps/dm²) (When used as soak-electro)
Equipment:..... Mild steel or polypropylene tanks, anodes and heating coils
Ventilation: suggested when used as electro cleaner

Note 1: Lower operating temperatures 130 to 150°F (54-66°C) should be reserved for brass alloys.

Note 2: An overflow for skimming off floating soils is recommended when **Aquaease™ SL 13** is being used as a soak.

CONTROLS

TITRATION PROCEDURE

1. Pipette a 20 ml sample into a 250 ml Erlenmeyer flask.
2. Add 30 mls water and drops phenolphthalein into flask-swirl flask to insure complete mixture.
3. Titrate with 0.5 N HCl until solution turns colorless.
4. Record mls 0.5 N HCl used.

CONCENTRATION Aquaease™ SL 13 (% VOL) = 0.44 X MLS 0.5 N HCL USED



Product Bulletin

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TEST KIT PROCEDURE

1. Fill bottle 1/3 full with water.
2. Using syringe, add 1 ml sample of Aquaease SL-13 working bath.
3. Add 8-10 drops methyl orange indicator.
4. Add 0.72 N Hydrochloric Acid drop wise, record number of drops required for color change from yellow to pink.

Aquaease™ SL 13 (% VOL) = 0.44 X DROPS 0.72 N Hydrochloric Acid

WASTE DISPOSAL

Discharge rinse waters 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.

CAUTION

Aquaease™ SL 13 is an alkaline product and should be handled accordingly. 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.