Aquaease™ SL 13

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 & Benefits

Used on a wide range of metal substrates	Can be used as a single soak electro cleaner
High conductivity	High detergency

Physical Data

Specific gravity	1.21
Solubility in water	Infinite
Appearance and odor	Clear, pale yellow liquid

Typical Applications

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

Operating Conditions

Concentrations	4% – 12%
Temperature	130°F – 200°F (54°C – 93°C) Operate at 120°F – 135°F (49°C – 57°C) when processing zinc die-casting, brass alloys, and copper laminate

Time	1 – 5 min
Current density	20 – 50 amps/ft^2 (2.0 – 5.0 mps/dm^2 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°F to 150°F (54°C to 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.

Titration Method

1. Pipette 20 mL of a working bath sample into a 250 mL Erlenmeyer flask.
2. Add 30 mL water and drops Phenolphthalein into flask. Swirl flask to insure complete mixture.
3. Titrate with 0.5 N Hydrochloric Acid until solution turns colorless.
4. Record mL used.

Calculation

Concentration = mL 0.5N HCl x 0.44

Test Kit Method

1. Fill bottle 1/3 full of water. Add 1.0 mL sample of Aquaease SL 13 working bath.
2. Add 10 drops Methyl Orange indicator.
3. Add 0.72 N Hydrochloric Acid dropwise until the color changes from yellow to pink.
4. Record number of drops used.

Calculation

Concentration = # Drops 0.72N HCl x 0.44

Waste Disposal

Discharge rinse waters and spent solutions to a permitted disposal system. 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.

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].