Aquaease™ PL 918

Aquaease PL 918 is low foam, heavy duty caustic, chelated alkaline soak, ultrasonic, electro, and spray cleaner for steel, stainless steel, nickel, copper, and copper alloys.

Features & Benefits

Removes light surface oxides	Produces a metallurgical clean surface
Excellent particulate soil removal when used as a spray	Effective at low operating temperatures
Biodegradable wetting system	Easily waste treated
High detergency	Removes light rust on steel and 400 series stainless steel

Typical Applications

- Spiral spray washing stamped parts
- Spiral spray washing of deep drawn parts
- General purposed soak (immersion) cleaner & electro cleaner
- Application in rack, barrel, and continuous strip plating lines
- Light de-rusting of steel and 400 series stainless steel parts
- Cleaning nickel clad parts such as battery cans
- Parts cleaning prior to plating, black oxide, or phosphate
- Heavy duty steam cleaning of steel and Stainless-Steel tanks and process equipment

Operating Conditions

Immersion (Rack or Barrel) and Spray:

Concentration	1% – 20%
Temperature	90°F – 200°F
Time	1 – 6 min
Equipment	Mild steel tanks and heating coils
Ventilation	Suggested

Note: For use in a power spray machine (spiral spray washer, belt washer, monorail washer) operating concentration may range from 1 to 5% (vol) and operating temperature 90° to 165°F.Immersion applications concentration range begins at 5% and operating temperature range from 100°F+.

Electro-Clean (Anodic, Cathodic, and PR):

Concentration	10% – 25%
Temperature	100°F – 200°F (38°C – 93°C)
Rack current density	40 – 80 amps/ft^2 (4.0 – 8.0 amps/dm^2)
Barrel current density	10 – 40 amps/ft^2 (1 – 4 amps/dm^2)
Equipment	Mild steel tanks and heating coils

Note: The above concentrations given are for a wide variety of applications. For the average jobs, the concentration may range between 15 to 20% (volume). Consumption of the cleaner is affected by reaction with soils, neutralization of fatty acids, and drag out of the cleaner solution.

Additions to maintain desired concentration are recommended.

Automatic Analysis Control

Aquaease PL 918 additions and analysis control may be readily achieved by automatic means. Product additions are automatically dispensed by use of conductivity analysis control. Maintaining the cleaner bath at optimum operating concentration significantly contributes to minimizing cleaning problems. It also is compliant to SPC (Statistical Process Control) where NADCAP and ISO requirements are critical to the operation. Consult Hubbard Hall's technical staff for set up procedure.

Titration Method

1. Pipette a 10 mL sample into a 250 mL Erlenmeyer flask and dilute with 50 mL of distilled water.
2. Add 4 to 8 drops Methyl Orange indicator and mix.
3. Titrate with 0.5 N Hydrochloric Acid until the color changes from orange to pink.
4. Record mL used.

Calculation

Concentration = mL 0.5 N HCl x 0.69

Test Kit Method

1. Fill bottles 1/3 full of water.
2. Add 1/2 mL of Aquaease PL 918 solution
3. Add 4 to 8 drops of Methyl Orange indicator.
4. Add 0.72 N Hydrochloric Acid drop wise to a pink endpoint.
5. Record number of drops used.

Calculation

Concentration = # Drops 0.72 N HCl x 0.71

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

Read and understand the Safety Data Sheet prior to handling Aquaease PL 918.

Our people. Your problem solvers.

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