Aquaease™ PL 918

DESCRIPTION

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 AND BENEFITS

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

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 to 20% by volume
- Temperature:......................... 90° to 200°F.
- Time:.....................................1 to 6 minutes
- 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% (vol.) and operating temperature range from 100°F.

**Electro (anodic, cathodic, and PR):**

- Concentration:......................10 to 25% (volume)
- Temperature:.........................100 - 200f (38 to 93c)
- Rack Current Density:.............40 to 80 amps/ft² (4.0 to 8.0 amps/dm²)
- Barrel Current Density:............10-40 amps/ft² (1-4 amps/dm²)
- 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. This can be achieved by accurate determination of the Aquaease PL 918 concentration by the following methods.
CONTROL

TITRATION PROCEDURE

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

Milliliters (ml) of 0.5 N Hydrochloric Acid X 0.69 = % by volume Aquaease PL 918

TEST KIT METHOD

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

% by volume Aquaease = 0.71 X number of drops 0.72 N Hydrochloric Acid

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.

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

The same working solution of Aquaease™ PL 918 should not be used to clean copper alloys, steel and stainless steel.

Aquaease™ PL 918 is an alkaline product and should be handled accordingly. Avoid skin and eye contact. Wear protective clothing, goggles and gloves. Flush exposed areas immediately with clean cold water. Contact a doctor promptly in case of injury. Consult MSDS for details.

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.