

Aquaease™ S 986

Aquaease S 986 is a heavy duty, powdered, alkaline soak cleaner for ferrous metals, copper and brass alloys. It may be used in rack or barrel lines for cleaning metals which have as their soils: buffing and polishing compounds (steel only), drawing compounds, stamping oils, water base forming lubricants, machinery lubricants, etc. Aquaease S 986 will perform in areas, which have a high degree of water hardness.

Features & Benefits

Effective on all types of oils, drawing compounds, lubricants	Splits most oils
Suspends particulate soils	Prevents soil redeposition
May be used with ultrasonic	May be used with ultrasonic

Physical Data

Solubility in water	Appreciable
Appearance	Brown granular powder

Typical Applications

- Heavy duty soak cleaning
- Ultrasonic soak cleaning and buffing compound removal
- Soak cleaning prior to black oxide
- Soak cleaning prior to phosphate conversion coating
- Soak cleaning prior to plating.
- Tumble cleaning and de-burring

Operating Conditions

Concentration	4 – 8 oz/Gal (max) (30 – 120 g/L)
Temperature	150°F – 200°F (65°C – 93°C)
Time	2 – 8 min

Agitation	Not required. Mild agitation is beneficial, may foam if excessive.
Equipment	Mild steel tanks and heating coils

Tank makeup

Fill the tank with 3/4 the quantity of water and heat the water to 130°F to 140°F (54°C to 66°C) then slowly add the full amount of Aquaease S 986 mixing by mechanical means.

After all the Aquaease S 986 has been added raise the solution temperature to 180°F to 190°F (82°C to 88°C) to insure complete dissolution of all components in the product. The solution should be brown with no materials floating on the surface of the solution.

Add water to reach desire tank volume.

Note: When adding Aquaease S 986 to an operating solution, add slowly to avoid solution eruption.

Titration Method

1. Pipette 10 mL sample of Aquaease S 986 into a 250 mL Erlenmeyer flask and dilute with 50 mL of water.
2. Add 8 to 10 drops of Phenolphthalein indicator.
3. Titrate with 0.5 N Hydrochloric Acid until the solution turns from red to light brown color (or clear dependent upon strength of Aquaease S 986 solution). A high concentration will have a light brown color.
4. Record mL used.

Calculation

$$\begin{aligned} \text{Factor (oz/Gal)} & \quad 0.70 \\ \text{Factor (g/L)} & \quad 5.30 \\ \text{Concentration} & = \text{mL } 0.5 \text{ N HCl} \times \text{Factor} \end{aligned}$$

Test Kit Method

1. Fill sample bottle 1/4 full of water. Using the syringe, transfer a 1/2 mL sample of Aquaease S 986 into the sample bottle.
2. Add 5 to 10 drops of Methyl Orange indicator.
3. Add 0.72 N Hydrochloric Acid Solution dropwise until the color changes from yellow to an orange/red endpoint.
4. Record the number of drops used.

Calculation

$$\begin{aligned} \text{Factor (oz/Gal)} & \quad 0.44 \\ \text{Factor (g/L)} & \quad 3.30 \end{aligned}$$



Concentration = # Drops 0.72 N HCl x Factor

Waste Disposal

Discharge rinse water 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 S 986 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 SDS for details.

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Our People. Your Problem Solvers.

For more information on this process,
please call us at 203.756.5521 or email: techservice@hubbardhall.com

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