



# Aquaease™ PL 86

Aquaease PL 86 is an extremely low foam heavy-duty alkaline spray cleaner for ferrous and non-ferrous metals.

Aquaease PL 86 is a concentrated liquid, silicate based, alkaline, phosphate-free cleaner developed for cleaning hard to remove soils such as chlorinated and sulfurized oils, grease, carbonaceous and particulate residues from aluminum, cast iron, steel, zinc, magnesium, and stainless steel.

Aquaease PL 86 may also be used as the initial alkaline soak cleaner in aluminum finishing operations such as: anodizing, chromate conversion, and plating on aluminum. It is an effective ultrasonic soak cleaner.

## Features & Benefits

Very low foam over a large temperature range 120°F – 180°F	Can be sprayed at high pressure
Multi metal cleaner, will not etch aluminum	Effective on carbonaceous and particulate soils, oils, and greases

## Physical Data

Specific gravity	1.15
Solubility in water	100%
Appearance and odor	Amber liquid, mildly sweet “earthy” odor
pH concentrate	~ 13.2

## Operating Conditions

Concentration	2% – 20%
Temperature	110°F – 190°F
Contact time	2 – 10 min



Equipment	Mild steel, stainless steel or Polypropylene tanks
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Aquaease PL 86 contains silicate so solutions should never be carried directly into an alkaline etchant. Work must be rinsed prior to alkaline etching. Rinse temperature should be greater than 150°F. will remove any residual silicate films that may be present.

## Titration Method

1. Pipette 50 mL sample of cleaner solution into a 250 mL Erlenmeyer flask and dilute to 100 mL with water.
2. Add 5 to 10 drops of Methyl Red indicator.
3. Titrate with 0.5 N Hydrochloric Acid until the solution turns bright pinkish/red.
4. Record mL used.

Calculation

$$\text{Concentration} = \text{mL } 0.5 \text{ N HCl} \times 0.64$$

## Test Kit Method

1. Fill test kit bottle 1/2 way with water.
2. Using a syringe measure out a 5 mL sample of Aquaease PL 86 and transfer it into the test kit bottle.
3. Add 5 to 10 drops Methyl Orange indicator.
4. Add 0.72 N Hydrochloric Acid dropwise until the solution turns reddish orange.
5. Record the number of drops used.

Calculation

$$\text{Concentration} = \# \text{ Drops } 0.72 \text{ N HCl} \times 0.31$$

## Waste Disposal

Discharge to a disposal system. In order to be completely informed on the latest regulations for your area, please contact the local authorities.

## Caution

Aquaease PL 86 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.



**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.

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## Our People. Your Problem Solvers.

For more information on this process,  
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