



Aquaease™ PL 111

Aquaease PL 111 is a heavy duty, low-foaming alkaline liquid cleaner for application in any of the following types of power spray machines: monorail conveyor, continuous belt, spiral washers or cabinet. Aquaease PL 111 was specifically developed to replace a vapor degreasing operation with a power spray washer system to facilitate a high rate of workflow.

Aquaease PL 111 may be used to clean ferrous metals, copper, brass alloys, bronzes, stainless steel and nickel clad stock. Aquaease PL 111 will clean a variety of metal processing lubricants such as synthetic lubricants, sulfurized, chlorinated, lard-based lubricants and drawing oils.

Features & Benefits

Splits oil	Can be used on multiple metals
Concentrate liquid	Biodegradable wetting/detergent system

Physical Data

Specific gravity	1.11
Solubility in water	Infinite
Appearance and odor	Clear amber liquid
pH (conc)	14.0

Typical Applications

- Conveyor spray cleaning
- Reel to reel spray cleaning
- Strip mill spray cleaning
- Turbo wash cleaning

Operating Conditions

Concentration	2% – 8% Optimum 5% for most applications
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Temperature	120°F – 200°F (49°C – 94°C)
Equipment	Mild steel tanks and heating coils

Aquaease PL 111 may be operated at a wide temperature range, 120°F to 200°F. The lower range, 120°F to 140°F, should be selected for cleaning non-ferrous metals.

Operating the Aquaease PL 111 solution at 135°F and above will provide a non-foaming spray cleaner; operating below 130°F will give a low foaming cleaner.

Titration Method

1. Measure a 100 mL sample into a 250 mL Erlenmeyer flask.
2. Add 4 to 8 drops Phenolphthalein indicator and mix well.
3. Titrate with 0.5 N Hydrochloric Acid until the color changes from pink to colorless.
4. Record mL used.

Calculation

$$\text{Concentration} = \text{mL } 0.5 \text{ N HCl} \times 0.44$$

Test Kit Method

1. Using syringe, place a 10 mL sample into the mixing bottle .
2. Add approximately 25 mL of water.
2. Add 5 to 8 drops Phenolphthalein indicator.
3. Add 0.72 N Hydrochloric Acid drop wise until pink color disappears.
4. Record the number drops used.

Calculation

$$\text{Concentration} = \# \text{ Drops } 0.72 \text{ N NaOH} \times 0.22$$

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 PL 111 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.



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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

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.