Properly Cleaning Portable Milking Units: A Step-by-Step Guide

**STEP 1: RINSE**
Disassemble all parts that must be hand-washed.
Rinse all surfaces immediately after milking with clean, lukewarm (100°F–110°F) water to remove milk solids.
When properly done, the rinse step removes more than 70% of the soil load.

**STEP 2: WASH**
For the wash cycle, you will need a chemical cleaning solution to remove any residual milk solids that have built up in the machine during milking.
Most dairy operations use a chlorinated alkaline detergent solution in either liquid or powdered form.
- Add your detergent to the wash water according to manufacturer specifications.
- Soak all parts of the milking machine in the detergent/water solution at a temperature of 120°F–135°F for at least 5 minutes.

**STEP 3: POST-RINSE**
- Rinse the milking equipment thoroughly (inside and outside) with clean, lukewarm (100°F–110°F) water before adding the acid rinse.
- Visually inspect the milking equipment for proper rinsing.

**STEP 4: ACID RINSE**
- Rinse all milking equipment with cold acidified water (pH of 3.0 to 4.0) for 2–3 minutes and drain. This step helps to prevent the development of milkstone and decreases the chances of bacterial growth within the milking system. The acid rinse also neutralizes the chlorine and alkaline residues from the wash cycle and helps to prolong the life of any rubber parts of the equipment.

**STEP 5: SANITATION**
- Most dairy operations soak the milking equipment in a chlorine-based sanitizer in a clean lukewarm water (100°F–110°F) solution.
- Sanitize all hand-washed parts and let drain.
- All surfaces of the milking equipment, teat cup liners, and other rubber parts that come into contact with milk MUST be thoroughly cleaned after each milking and sanitized before the next milking.

Liners and other rubber parts must be replaced according to the manufacturer recommendations or when the parts become soft, cracked, rough or have holes.
Pores and cracks in rubber parts keep residual milk solids and microorganisms from the effects of cleaning and sanitizing.