



# Soap Recommendations and Dispenser Maintenance

## Overview

Quality soap dispensers require good quality soap and periodic maintenance to properly operate. Bradley soap dispensers will provide dependable, consistent operation over the long term when soap with reasonable viscosity and pH levels are used and when a minimal amount of periodic maintenance is performed on the valves.

Most soap dispenser problems are caused by soap that is too thick or corrosive, or by a lack of maintenance. Many soaps come in concentrate form which must be diluted with water. Often, the soap is improperly diluted or used straight out of the bottle, which causes clogging and valve failure. If proper soap is being used, valves that have never been cleaned are usually the source of dispensing problems. With proper maintenance and soap, Bradley dispensers will provide long term, trouble free operation.

## Soap/Sanitizer Parameters

Soap thickness is determined by a measurement called viscosity. Liquid soap viscosity should be between 100 cps (centipoise) and 2500 cps for Bradley liquid soap dispensers unless specifically noted on a technical data sheet. Bradley gel sanitizer dispensers accommodate most commercially available gel sanitizer within a viscosity range of 100 cps – 3000 cps\*. Bradley foam soap and foam sanitizer dispensers accommodate most commercially available all-purpose, anti-bacterial, and PCMX/Triclosan foam solutions. Bradley liquid sanitizer dispensers accommodate most commercially available 70%–95% ethanol solution sanitizers.

\* Thicker soaps/sanitizers flow slower and inhibit the "flushing" action of the valves, which allows the soap to congeal in the valve, causing clogs.

## pH Level

Unless otherwise noted on the technical data sheet, the pH (acid) level of the soap should be in the range of 6.5 to 8.5. More acidic soaps (pH levels lower than 6.5) will corrode metal parts (even stainless steel) and degrade rubber and plastic components. They will also cause skin irritation. Most inexpensive soaps (typically the pink lotion type) fall into this acidic category and will eventually cause valve failure and metal corrosion.

**⚠ CAUTION Base soaps (pH levels higher than 8.5) will cause skin irritation and swelling or degradation of rubber and plastic parts.**

## Soap Valves

Valves must also be maintained (cleaned) to function properly. At the very minimum, hot water should be pumped through valves periodically to clear out soap residue. Ideally, valves should occasionally be soaked for 30 minutes in hot water or a soap valve cleaning solution. The valve should be pumped at least 20 times while it is soaking to clear any clogs. The soap reservoir should also be flushed with hot water. In cases of extreme clogging, the valve should be disassembled and the parts should be soaked in hot water or cleaning solution to restore proper functioning.

Generally, any quality soap meeting the viscosity and pH guidelines above will work well with Bradley soap dispensers. PCMX or Isopropanol based antibacterial soaps (within viscosity and pH limits) will also work with Bradley dispensers. Soaps satisfying these basic guidelines will provide consistent flow and reduce clogs.