

Soap recommendation for liquid soap dispensers





Which soaps must not be used?

- Paste / soaps outside of the below cited range of viscosity (the necessary flowing ability must be assured)
- Abrasive soaps
- Aggressive soaps with acid content
- Alcohol-based products (disinfectants)
- Soap that coagulates or forms residues

Alcohol-based soaps and/or soaps with alcohol (glycol, methanol, etc.) must not be used. Depending on the ‰ alcohol content, this does not necessarily cause damage, but can impair the device's functionality. Precise information about the ‰ content can be obtained from the manufacturer safety data sheet.

There are hand wash detergents to which certain organic solvents have been added and certain ingredients could damage the pump. These include in particular substances that dissolve paint and polyester e.g. dibasic ester (DBE). These must not be used.

Which soaps can be used?

Commercially available liquid and cream soaps that flow easily (tenside-containing preparation for washing hands) as well as fluid natural soaps can be used.

What is the permissible viscosity range for these soaps?

The viscosity of the soaps should lie within the range from 1,000 - 3,500 cps (centipoises). The viscosity of normal commercially available cream soaps and liquid soaps lies in this range. Viscosity varies anyway, depending on the temperature, evaporation, thickening, etc. The general rule is that the soap should flow well at room temperature. The thicker the soap, the lower the dosing volume per stroke will be.

The following table provides an overview of viscosities. Viscosity is usually given in centipoises (cps). Unless stated otherwise, the viscosity values given apply for a temperature of 20°C.

Water 4°C Water 25°C Benzol 25°C Milk Blood 37°C Cooking oil	1 cps 0,9 cps 0,6 cps 3 cps 4 – 25 cps 1.000 cps	Syrup Honey Ketchup Mustard Sour cream	5.000 cps 10.000 cps 50.000 cps 70.000 cps 100.000 cps
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1 cps = 1 mPas = 10 Pas = 0.01 P (Poise) = 0.00100 (N s)/m2

 $1 \text{ Pas} (\text{N s/m}^2) = 10 \text{ P} (\text{Poise}) = 10^3 \text{ cps}$

1 P (Poise) = 0.1 Pas = 100 cps = 0.1 kg/ms



How should the pumps be cleaned?

The pumps can all be removed and then rinsed and pumped through with warm water. Under no circumstances should aggressive cleaners (e.g.: acid or lime removers) be used. We advise not to use alcoholic disinfectants. The soap can become thicker when it remains in the dispenser for a long time. In order to re-establish the proper functionality of the pump, it should be rinsed with water. Soap residues on stainless steel should be removed immediately. When not removed properly (cleaning), soaps containing tensides can lead to corrosion on stainless steel.

Which pH value is permissible for these soaps?

The pH value of the soaps should lie in the range 6 - 9. However, the pH value is less important for the pump than for the skin. Extremely low pH values could cause damage to the internal parts of the pump (e.g.: spring made of stainless steel).

Specifications:

Depending on the make, soap dispensers deliver soap in quantities ranging from 0.6 - 2.0 ml. However the dosing quantity depends very strongly on the flow rate of the soap and the speed at which the plunger is used.



KWC Group AG offers the following liquid soaps: