

## **Processing Guide: Liquid Soap 105C**

## (COSMOS CERTIFIED)

Like all high water based personal care products, Liquid Soap 105C soap base is susceptible to microbial contamination. Good hygiene and manufacturing practices must be carried out when using this product at all times.

Before filling this product please ensure the Liquid Soap 105C soap base is above 15°C and clear. If the product is below this temperature it will display a haze, which will not clear with further additions. Formulation must take place once the product is at the correct temperature and clarity.

- 1. Make up a 20% salt\* solution in warm deionised or softened water. Ensure that all the salt is fully dissolved.
  - Warm the deionised or softened water. (The warmer it is the faster the salt will dissolve.)
  - Turn agitator on slow.
  - Add salt.
  - Stir until salt is fully dissolved and you have a clear solution.
- 2. To a sterilised vessel with a suitable stirrer (preferably with variable speed), lid and heater add the Liquid Soap 105C.
- 3. To speed up the time it takes to dissolve the essential oils\*\*, pre-warm the Liquid Soap 105C soap base to 30 35°C. With the stirrer on, add the organic essential oils as required (typically add 0.3 0.5%). Stir for 10-15 minutes, or until the essential oils are fully dispersed and, in some cases, fully dissolved.
- 4. With stirrer on slow, add 20% salt solution\*\*\* to the vortex created by the stirrer. Mix until homogeneous and thickened. Pre-warming to 30-35°C will aid stirring and make the salt solution disperse more quickly.
- 5. Check viscosity against the desired specification
- 6. Add extra salt solution if required\*\*\*\*. Further adjustments should be made in increments of around 0.2 0.4% of 20% salt solution

\*To gain Organic certification salt tablets that do not contain anti-caking agents should be used. If you do not use deionised or softened water (i.e. tap water) then the body wash will turn cloudy.

\*\*Due to the nature of this Liquid Soap 105C soap base, which is derived from several natural and organic ingredients, additives such as some essential oils can turn it very cloudy. Over time some of these ingredients may slowly dissolve so that the product looks slightly clearer, but others can agglomerate and make the product look hazy or not homogenous. Although the appearance may not be aesthetically appealing the product can be perfectly functional. Stability testing should be performed.

\*\*\*Laboratory trials should first be carried out to determine how much salt solution is required.

\*\*\*\*To be used as a rough guideline: Typically a 5% addition of 20% salt solution should thicken the product to 4,000 - 8,000 CPS Brookfield Viscometer, spindle 3 @ 12rpm @ 25°C

## Filling of thickened Liquid Soap 105c

Before filling the processed thickened Liquid Soap 105C soap base, it is advisable that it should pass microbiological testing.

The viscosity of a salt thickened Liquid Soap 105C soap base is greatly affected by temperature. The colder it is the thicker it becomes. The filling temperature should be considered, and typically would be around 15 - 30°C.

The filled product should pass microbiological testing.

**Please note:** due to the nature of this Liquid Soap 105C soap base, and the possibility of developing a cloudy or non-homogenous appearance with certain additives, it is advisable not to fill into clear packaging.

**Certification Status: COSMOS** 

COSMOS: 23% Organic Ingredients

28.28% CPAI