Processing Guidelines

LIQUID SOAP PS410, PS419, PK-SG, NRA, 101, 105, 107 and BODY WASH BASE C

1. HOW TO FORMULATE

Adding Fragrance to Liquid Soap

Trials in our laboratories have shown that most perfumes can be used successfully in Liquid soap bases.

Note: The choice of perfume may impact:

- Ease of use and solubility
- Stability of the soap at low temperatures
- Colour of the soap

Fragrances levels of 1% or less are usual. It is advised that a 3% maximum of additives to be added to the base including 1% maximum for fragrance. Levels of 3% or more may affect colour and clarity of soap at low temperature.
If required, a solubilizer such as Polysorbate 20 at a ratio 4:1 Solubilizer: perfume may be used to obtain better clarity.

Colouring Liquid Soap

Add a small amount of either powdered or liquid colourants until you have the desired colour. If having trouble dissolving powdered dyes into the liquid soap base, dissolve the powder into a small amount of water prior to addition. Though this may affect the viscosity.

2. HOW TO THICKEN LIQUID SOAP

Note: Salt Solution cannot be used to thicken Liquid PK-SG.

Addition of Salt Solution to Liquid Base

Start adding a 20% w/w salt solution at 0.2% increments until the desired thickness is reached.

Thickening Liquid PK-SG

To thicken Liquid PK-SG, Cellulose gum must be used. However, this cannot be added directly to the Liquid PK-SG.
A 5% w/w Cellulose Gum solution in water should be made using deionised or softened water
Add the 5% solution in increments, mixing in thoroughly and allowing to stand for a few minutes between each addition until the desired thickness is reached.
Note: Thickening this product will impact the Clarity.

3. STABILITY GUIDANCE

During the development of this base our standard stability testing protocol was successful
Once the base has been used to formulate a final finished product, via the addition of additives, we highly recommend that stability / compatibility is repeated to verify the final product.

4. MICROBIOLOGY GUIDANCE

Soap base has an alkaline pH> 9, this naturally creates a hostile environment for microbe and therefore unfavourable for the growth of microorganisms. As a result, preservation is not usually required.
To verify this theory (BS ISO 29621:2010), we have conducted microbiological challenge testing on representative soap bases, and they have passed.
Once a final finished product has been developed, we highly recommend that microbiological challenge testing is repeated on the final product.

5. PROUCT SAFETY

Our product bases have been formulated to comply with the Cosmetic Product Regulation (EU) No.1223/2009.
Once the base has been used to formulate a final finished product, via the addition of additives and fragrance, a final Cosmetic Product Safety Report (CPSR) will be required for sale in the EU/UK.

6. STORAGE

Optimum storage conditions 15-25^{o}C
For base shelf-life, see delivery certificate of analysis (CofA).
For more info, tips and troubleshooting tricks on our soap bases, visit our website www.stephensonpersonalcare.com