Stephenson

Processing Guidelines

LIQUID SOAP RANGE

CONTENTS

1. HOW TO FORMULATE

Perfuming 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 usually give an acceptable odour and rarely cause stability problems. 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

Liquid Soap can be made in almost any colour by adding colourants.

Add a small amount of colour to the base and build until the desired colour is reached. Both powder and liquid colourants can be used. 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.

Making a 20% Salt Solution

Example table:

	Weight/g
Salt	20
Deionised/Softened water	80
Total =	100

Stir thoroughly until salt is dissolved.

Addition of Salt Solution to Liquid Base

Start adding salt solution at 0.2% increments until the desired thickness is reached.

Thickening Liquid PK-SG

Liquid PK-SG can not be thickened using salt solution as described above.

To thicken Liquid PK-SG, Cellulose gum must be used. However, this can not be added directly to the Liquid PK-SG.

First a 5% solution in water should be made up 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 successfully conducted, this included monitoring for a 12-week period under the following conditions: Ambient (light & dark), Fridge (5°C), Oven (40°C)
Once the base has been used to formulate a final finished product, via the addition of additives, fragrance, or salt thickening, we highly recommend that additional stability is conducted to verify the final product.

4. MICROBIOLOGY GUIDANCE

Soap base has an alkaline pH, this naturally creates a hostile environment for microbes. Soaps with alkaline pH>9 present an environment unfavourable for the growth of microorganisms. As a result, preservation is not usually required.

To verify this risk theory (BS ISO 29621:2010), we have conducted microbiological challenge testing on representative soap bases to ensure the robustness of the bases.

Once the base has been used to formulate a final finished product, via the addition of additives and fragrance, we highly recommend that additional microbiological challenge testing is conducted to verify 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 5-30°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