

Liquid Soap 101* **Processing Conditions**

*Made using Organic Coconut & Olive Oil.

The LIQUID SOAP 101 provides a simple way of producing a variety of Personal Care and Household Cleaning Products that can be marketed as USDA Organic, Cosmos, Ecocert or simply certified organic.

The use of LIQUID SOAP 101 allows you to efficiently and cost effectively manufacture a range of cleansing products including Hand Washes, Hand Foamers, Foam Baths, Cleaning Products and much more. Opaque cleansing products can be produced by the addition of Opacifiers, thereby increasing the number of possible variants.

The user can simply dilute the LIQUID SOAP 101 with softened or Deionised water, add further Chelate, perfume, colour and preservative of your choice, proceed to thicken with your selected thickener, such as Cellulose Gum, or Guar Gum- (Note- Salt cannot be used). Surfactants can be added to the LIQUID SOAP 101 to both lower pH and/or enhance cleansing properties such as foaming if required (NOTE-Addition of surfactants negates any Organic claim you wish to make) the soap base can also be used as a replacement or part replacement of surfactants themselves in Organic product formulation.

Like all water based organic personal care products, LIQUID SOAP 101 is susceptible to microbial contamination.

Good hygiene and manufacturing practices must be carried out when using this product at all times.

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* Any Organic Claims can only be made if the filler / co packer conforms to relative Organic Guidelines & Procedures.

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Registered in England No. 68499 Registered Office:

Brookfoot House, Low Lane, Horsforth, Leeds, LS18 5PU, UK

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KEY FACTORS

Below are the Key Factors to be aware of when using LIQUID SOAP 101, on any further dilution this soap base will require – CHELATING & PRESERVATION.

To speed up the time it takes to dissolve the essential oils, pre-warm the LIQUID SOAP 101 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.

INGREDIENT LIST

Aqua

*Potassium Cocoate

*Potassium Oliviate

**Glycerin Citric Acid

Potassium Citrate

PHYSICAL PROPERTIES

Appearance: Amber / Clear Yellow Liquid at 20°C

Clarity: Clear (2:1 dilution with softened water): This product is a concentrate. FFA: 0.7 - 1.1% (as MWt 228)

Non-Volatile Solids: 41% - 45%

pH (neat) 25°C: 10.0– 10.8

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PROCESSING STEPS

1-WATER/ORGANIC JUICE + CHELATE 2- DILUTION OF SOAP 3- PRESERVE 4-FRAGRANCE
5-COLOUR 6-THICKEN 7-STABILITY

1.DILUTION

Diluting the LIQUID SOAP 101 must be done with Softened Water / Deionised water. ANY FURTHER dilution from the concentrate requires a Chelate and Preservative. Lack of additional Chelate following dilution may cause the liquid to cloud and sediment to form.

2.CHELATING

It is recommended that a Chelate is added to any product derived from LIQUID SOAP 101, particularly those that involve dilutions. This prevents sediments forming and clouding of products. Compatibility of chelates and products should be checked with a supplier- for examples some will be pH dependent.

Chelates should be added into the water phase when formulating.

3.PRESERVING

In its concentrated form (45% active) LIQUID SOAP 101 does not require a preservative. Once any dilution takes place a suitable preservative must be added to the product. The choice and percentage of preservative will depend on marketing/certification requirements, pH dependency, and formulation compatibility.

4.FRAGRANCING

Synthetic perfumes or essential oils can be added to fragrance a LIQUID SOAP 101 product. These should be added before thickening the product and can require a solubiliser (choice dependent). This prevents the fragrance dropping out of the formulation and giving a heterogeneous product. Compatibility of fragrances with soap can differ greatly; consulting your fragrance house is advised.

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Please note. Due to the nature of the LIQUID SOAP 101, which is derived from natural ingredients (organic coconut oil & organic olive oil), additives such as some essential oils can turn it 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.

5. COLOURING

Colours can be added to LIQUID SOAP 101, and these should go into the formulation before any thickening. Depending on the requirements of the formulation (e.g. organic), the choice of colourants is down to the product finisher- compatibility should be checked and tested. Opacifiers can also be used to create an opaque finished product. The levels of opacifier required can vary depending on formulations, dilutions and on the actual chosen opacifier- Opacifiers should be charged pre-thickening.

6. THICKENING

Thickening the diluted LIQUID SOAP 101 can be achieved using thickeners such as cellulose. A Salt solution does not thicken the LIQUID SOAP 101. When formulating ensure the thickener is charged at the last possible point (after fragrance and colour) to ensure that components can become homogenous in the solution.

PH ADJUSTMENT

The pH of LIQUID SOAP 101 is 10.0 – 10.5. The pH cannot be adjusted using citric acid.

For further information please contact our Personal Care team-
www.stephensonpersonalcare.co.uk

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