

FOR EXPERIENCED CP AND HP SOAPMAKERS ONLY

Milk soap formulation and information (Suitable for both infants * and everyone else too!)

Basic formulation

Olive oil	500g
Coconut Oil	200g
Cocoa butter	100g
Shea butter	100g
Castor oil	50g
Speciality oil - client choice see list A	50g
NaOH	136 g
Water	200g
“Milk” - client choice see List B	100g
Oats	50g
Syrup / sugar / honey- client choice see list C	25g
Essential oils	6.5g

Choose either Sweet Orange (Aurantium Dulcis/Sinensis), Lavender, Chamomile (Anthemis Nobilis or Chamomilla Recutita Flower Oil). May also be sold Unfragranced. Note – all single essential oil variants are included as part of the report.

* any soaps which include essential oils are suitable for infants 3-36 months. Unfragranced soaps are suitable from birth.

Method

Melt Coconut Oil, Cocoa butter, Shea butter - Add Olive and Castor - Allow to cool to room temp

Add Caustic to 200g water – careful!! This is 40% caustic solution so will generate a little more heat than full water content dilution - allow to cool

In a separate container – add milk, sugar/syrup/honey, oats and speciality oil – stick blend to a fine emulsion.

Add caustic solution to cooled, melted bulk oil mixture – blend to light trace

At this stage, add the emulsion – Stir or gently stick blend to incorporate

thoroughly Pour into moulds

Rationale

Adding the caustic solution to the bulk oils and bringing to trace is the start of the saponification reaction. During this phase, the oils/fats are partially broken down to composite fatty acids and glycerine. The fatty acids react with the caustic to produce fatty acid sodium salts AKA soap – but at this stage there is also still free caustic and free fatty acids. This mixture has the potential to react with the sugars in the syrup to produce sugar fatty acid esters, which are very gentle cleansing agents.

The added “milk” and proteins derived from the finely ground oats will also be hydrolysed by the un- reacted caustic – again, producing active skin care ingredients including traces of intact fine / colloidal oatmeal because they were added AFTER the initial reaction with caustic.

Additionally, by adding the nutrient oil in emulsified form, with the “milk” / syrup / oat mix, the potential for these oils to remain un-saponified is increased.

List A - Nutrient oils (Choose any one of these for all variants) [◇]

Apricot Kernel

Oil Argan Oil

Avocado Butter

Avocado Oil

Babassu Oil

Baobab Seed

Oil Beeswax

Black Seed Oil

Blackcurrant Seed Oil

Borage Oil

Broccoli Seed Oil

Camelina Seed

Oil Camellia

Seed Oil

Candelilla Wax



Canola Oil

Carnauba Wax

Castor Oil

Cherry Kernel

Oil Chia Seed

Oil Cocoa

Butter

Coconut Oil

(fractionated) Coconut

Oil / Butter Coffee Oil /

Butter

Corn Oil

Cottonseed Oil

Crambe Seed Oil

Cranberry Seed

Oil Cucumber

Seed Oil

Grapeseed Oil

Hazelnut Oil

Hemp Seed

Oil Illipe

Butter Jojoba

Oil Jojoba

Wax Kiwi

Seed Oil

Kokum

Butter Kukui



Nut Oil

Linseed Oil

Macadamia Nut Butter

Mango Butter

Meadowfoam Seed Oil

Moringa Seed

Oil Oat Oil

Olive Oil

Palm Oil

Papaya Seed Oil

Passionfruit Seed

Oil Peach Kernel

Oil Plum Kernel

Oil

Pomegranate Seed

Oil Prickly Pear

Seed Oil Pumpkin

Seed Oil Rapeseed

Oil Raspberry Seed

Oil Rice Bran Oil

Rosehip Seed Oil

Safflower Oil (Inc. High Linoleic

Type) Sea Buckthorn Oil

Sesame Seed Oil

Shea Butter

Soybean Oil

Strawberry Seed

Oil

Sunflower Oil (Inc. High Oleic

Content) Sweet Almond Oil

Walnut Oil

Watermelon Seed

Oil Wheat Germ Oil

For all infant products refined oils should be used.

List B – ‘Milks’ (Choose any one of these for all variants)

Cow Milk

Goat Milk

Sheep Milk

Donkey

Milk

Almond

Milk

Cashew Nut

Milk Coconut

Milk Hazelnut

Milk Oat Milk

Rice

Milk

Soy

Milk

Cream

Yoghurt – plain, unsweetened only

List C – Sugars (Choose any one of these for all variants)

Honey



Sugar (white or brown)

Maple Syrup

Agave Syrup

Note that this recipe and method is the property of Cosmetic Safety Solutions Ltd and may not be reproduced in full or in part unless with the express permission of Cosmetic Safety Solutions Ltd. Use of the formulation and method is limited to activities covered by the accompanying CPSR. No liability is accepted for the use or misuse of the formulation.