Shampoo and Body Wash

Please see The Herbarie Update July 2003 Part I and II for more information.

A basic shampoo or body wash can be made with a cleansing agent, known as a surfactant, distilled water and preservative. However, this will not make the best shampoo or body wash. By using additional ingredients, the shampoo/body wash can be given different characteristics to make each one suitable for different hair or skin types.

All formulas will vary, but a general rule could be to use approximately 20-35% surfactant(s), with the remainder in water, additives, preservative. Other ingredients to consider include the following: A thickener is usually needed to make shampoo/body wash---something like Crothix or PEG 150 Distearate. Emollients, such as EmEster or Dimethicone Copolyol Ester can be added to help with wet-combing and add shine. We do not recommend adding vegetable oils to shampoo/body wash since the foam and cleansing will be compromised. Oils can effect the clarity of the product also. Hydrolyzed proteins, such as Hydrolyzed Wheat Protein can be added to increase the moisture retention and to smooth the hair shaft. Nutrients, such as dl panthenol can be added to nourish the cuticle and prevent damage. Botanical Extracts and Complexes can be used to add nutrients and smooth the hair shaft. Conditioners, such as GuarSilk or VenaSilk can be added to increase softness and manageability. Essential Oils or Fragrance Oils can be added according to personal preference—but generally no more than 1% or so.

Fragrance oils will often react differently with the surfactants and can sometimes cause the mix to become too thin. Each fragrance oil may require a variation in the basic formula. Experiment with your shampoo/body wash and different fragrances to make sure you get the effect you want. Essential Oils that do not seem to have any significant effect on surfactants are lavender, geranium, rosemary, peppermint, clary sage, sandalwood, rosewood. The citrus essential oils have a tendency to “thin-out” the shampoo/body wash. It sometimes helps to add the fragrance or essential oil to a small amount of solubilizer such as polysorbate 20 or PEG 40 castor oil, mix well, and then add it to the shampoo/body wash mix.
When adding the surfactant blend to the water, make sure the stirring is gentle. Avoid mixing so as to create air bubbles in the mix. Polysorbate 20 will help sometimes to create a clear blend and can also be used to “thin-out” the blend if it is too thick. Glycerin can also be used to help thin-out a too thick shampoo/body wash.

Suggested surfactant combinations:

**Polyglucose/Lactylate Blend** – Decyl glucoside (nonionic) is combined with Sodium Lauroyl Lactylate (anionic) for good cleansing and foaming characteristics. Considered “all natural” – ultramild, clear product. No other surfactant is needed although when used with the Cocobetaine/Lactylate Blend the synergistic effect will produce more foam and a thicker product.

**Cocobetaine/Lactylate Blend** – Cocamidopropyl Betaine (amphoteric) is combined with sodium caproyl lactylate (anionic) for excellent foaming and cleansing. The lactylates are foam boosters, as well as conditioners. This surfactant combo makes a clear, mild product. No other surfactant is needed although when used with Polyglucose/Lactylate Blend the synergistic effect will produce more foam.

**Decyl Glucoside and Cocamidopropyl Betaine** – Decyl Glucoside (nonionic) and Cocamidopropyl Betaine (amphoteric). Economical, clear and mild product.

**SCI Pearl and SMC Taurate** – Anionic blend. thick, creamy and mild product. Please note that product will be almost translucent when first made. Over a few hours or overnight the product will be come opaque white and creamy.

**SMC Taurate and Polyfactant DLS** – One of the mildest anionic blends available. Produces a pearly product. Suitable for sensitive skin.

**SCI Noodles and Polyfactant DLS** – Anionic blend will produce a thick, creamy and mild product. Excellent creamy body wash or shampoo with dense, luscious foam. Please note: SCI Noodles require very hot water for dispersion/melting prior to completing formula.

**Polyfactant DLS** – Ultramild anionic disodium laureth sulfosuccinate combined with nonionic ultramild decyl glucoside will produce one of the mildest blends available. Perfect for clear facial cleansers or cleansers for sensitive skin.