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EMULSIFYING WAXES INFORMATION SHEET

Emulsifying Waxes are used, as the name suggests, as an emulsifier, meaning to enable a water phase and an oil phase to blend into a cream or lotion.
The suggested percentage required in recipes do vary from 4% up to 10% depending on the thickness required of an end product.

INGREDIENTS:

EMULSIFYING WAX - Polawax GP200
- Cetearyl Alcohol (fatty alcohol)
- PEG-20 Stearate (non-ionic surfactant)

LANETTE WAX O
- Cetearyl Alcohol (fatty alcohol)
- Stearyl Alcohol (fatty alcohol)

LANETTE WAX SX
- Cetearyl Alcohol (fatty alcohol)
- Stearyl Alcohol (fatty alcohol)
- Sodium Alkyl Sulphate

Individual Ingredient Information:

Cetearyl Alcohol (fatty alcohol)
Cetearyl alcohol or cetylstearyl alcohol is a mixture of fatty alcohols, consisting predominantly of cetyl and stearyl alcohols and is classified as a fatty alcohol. It is used as an emulsion stabilizer, opacifying agent, and foam boosting surfactant, as well as an aqueous and nonaqueous viscosity-increasing agent. It imparts an emollient feel to the skin and can be used in water-in-oil emulsions, oil-in-water emulsions, and anhydrous formulations. It is commonly used in hair conditioners and other hair products. It is not really an "alcohol", such as rubbing alcohol, which would dry the skin, but it is an emulsifying wax, made by combining fatty alcohols from vegetable sources, such as coconut alcohol. It can also be made artificially. It is used often in cosmetics as an emollient, thickening agent, moisturizer, emulsifier, stabilizer, opacifier as well as a carrying agent for other ingredients. It is a substitute for making lotions if you don't have emulsifying wax as well.

PEG-20 Stearate (non-ionic surfactant)
Polyethylene glycol (PEG) is a polyether compound with many applications from industrial manufacturing to medicine. It has also been known historically as polyethylene oxide (PEO) or polyoxyethylene (POE) depending on its molecular weight,
PEG, PEO or POE refers to an oligomer or polymer of ethylene oxide. The three names are chemically synonymous, but historically PEG has tended to refer to oligomers and polymers with a molecular mass below 20,000 g/mol.

Stearyl Alcohol
Stearyl alcohol (also known as octadecyl alcohol or 1-octadecanol) is a substance prepared from stearic acid by the process of catalytic hydrogenation. It is a fatty alcohol. It takes the form of white solid granules or flakes which are insoluble in water, with a melting point of 60 °C and boiling point of 210 °C (at 15 mmHg or 2.0 kPa). It has a wide range of uses as an ingredient in lubricants, resins, perfumes and cosmetics. It is used as an emollient, emulsifier, and thickener in ointments of various sorts, and is widely used as a hair coating in shampoos and hair conditioners.

Sodium Alkyl Sulphate
Sodium Alkyl Sulphate is a cousin to SLS (Sodium Lauryl Sulfate) which is synthesized by reacting lauryl alcohol with sulfuric acid to produce hydrogen lauryl sulfate which is then neutralized through the addition of sodium carbonate. Lauryl alcohol is in turn usually derived from either coconut or palm kernel oil by hydrolysis, which liberates their fatty acids, followed by reduction of the acid group to an alcohol.Due to this synthesis method, SLS is actually not pure dodecyl sulfate but a mixture of alkyl sulfates with dodecyl sulfate as the main component.