

Formulating With Shea Butter

Shea butter is a world renowned skin butter, originating in Africa.

It can be used on its own as a moisturser, or blended with an array of other ingredients to make different kinds of products. It is naturally good for a whole host of different skin conditions such as acne, burns, eczema, psoriasis, rashes, scarring and stretch marks to name a few. It is also rich in vitamin such as Vitamin A and Vitamin E. It helps keep the skin supple and elastic, moisturised and soft, and is great for dry skin. It is also very commonly used in hair care products.

Shea butters is amazing, but has a couple of quirks that you'll want to know about before using it. Let's dive in.

Types Of Shea Butter

Firstly, there are two main types of shea butter, unrefined and refined. These can both come in organic and conventional forms.

Unrefined

Raw, unrefined shea butter hasn't been processed or refined in any way, so it is common for it to look a little discoloured, lumpy or patchy. Raw, unrefined shea butter also has a unique scent profile that some people don't mind and others hate. Some might describe it as smokey, nutty or earthy, and it can be stronger or weaker depending on the batch. I personally don't mind the scent but I know of others who hate it! It's a personal preference.

It is important to remember that natural products, and particularly those that are in their raw form, can vary considerably by batch. We have often had customers complain about raw shea butter looking or smelling funky or 'off', but it's only because it is raw and unrefined, and that's just how it looks!

Refined

<u>Refined shea butter</u> on the other hand, has been processed to remove natural inconsistencies such as variations in colour, scent and texture. It is white in colour, smoother and has a neutral scent. You still get the moisturising properties of shea butter but without the natural variances in scent, colour and texture.

So Which Type Should You Purchase?

This depends on the type of product you are making as well as your customers.

Keep in mind that the scent of raw shea butter can come through to the final product and can be difficult to cover up, so your customers need to understand this. However if you have customers that appreciate and prefer raw ingredients, then raw shea butter will be an excellent choice.

If you need a consistent butter that is white and unscented, then definitely go for the refined shea butter. You can achieve consistent products with refined shea butter as it doesn't vary by scent, colour or texture. I recommend refined shea butter for lip balms and other products where scent is of importance.

Skin Feel

Shea butter is a rich, thick butter that also feels rich on the skin. If you put too much on it will be very slow to absorb and perhaps a little greasy. However it has a very moisturising, nourishing and softening feel.

Solubility

Shea butter is a butter, and therefore an oil - a hard oil to be precise. It will go perfectly with other oils and butters but you will require an emulsifier if you want to include any water or water based products.

So you can't mix things like aloe vera gel, hyaluronic acid, panthenol, hydrolyzed proteins or any other water based substances with shea butter unless you also include an emulsifier.

Products Containing Shea Butter

Shea butter is commonly found in all kinds of body products such as anhydrous body butters and balms, as well as moisturisers and hair care products. It is a great moisturiser for types 3 and 4 hair and is very popular in hair butters and hair conditioners.

Shea butter is also very commonly found in soaps.

Working With Shea Butter

Shea butter is easy to work with: in most cases you'll simply melt it first. Melting allows you to incorporate other oils and ingredients easily, allows for a smooth pouring, and it also allows you to add it to your heated phase in formulations.

Whipping

If you are making anhydrous body butters and balms, whipping your shea butter can give it a nice look and fluffier feel.

Here's how you do it:

Melt your shea butter, then add any other oils or ingredients (if using). Allow the mixture to harden until almost solid but not completely hard. Then get out the electric beaters and whip it until fluffy, likely a few minutes.

Preventing Graininess

One of the most common problems you may come across when working with shea butter is its tendency to develop grains after a while. You've melted it down and made a beautiful lip balm or body butter with it, it's all set and smooth and then bam! A few days (or even weeks or months) later, it develops this weird grainy texture that ruins the look and feel of the product.

This happens because shea butter is rich in stearic acid as well as other kinds of fatty acids, and each of these has a different profile. This means that each of these components has a different melting and crystalising (solidifying) temperature. So when there are temperature fluctuations during weather, transportation or even when you process your shea butter, these different components can melt and resolidify at different rates. This is what causes the graininess to develop.

The best way to prevent this is to constantly stir your shea butter as it cools down. The agitation from the stirring allows for a uniform temperature as it cools, and prevents different components in the butter from cooling at different rates. This should prevent grains from developing.

The other way to prevent graininess only works if you are making small batches. Pour your melted shea

butter into your containers and then flash cool them in the fridge. The sudden temperature drop forces all the components to cool at once which prevents any grains from developing. However as mentioned this only works with small batches (50–100g) as anything too large can't flash cool evenly. And if it doesn't cool evenly you'll end up with the grainy problem.

Preventing Greasiness

Shea butter can lend a bit of greasiness to a formula; it's a fat after all so that's just what it does. You can offset this to a degree by incorporating in some arrowroot powder. Arrowroot powder helps soak up some of the greasiness and leaves a more powdery, matte finish.

You can also combine it with light, fast absorbing oils. Try hemisqualane or capric/caprylic triglycerides.

Raising The Melting Point To Prevent Melting

Blend your shea butter with some stearic acid for additional hardness and to prevent it going soft or melting in hot summers.

You could also try blending it with other fatty alcohols such as cetyl alcohol or cetearyl alcohol.