

Formulating With Montanov 68 MB

We recently received a shipment of an exciting new emulsifier: [Montanov 68 MB](#). Also commonly known as Vegetal, Sugarmulse or Emulgade, Montanov 68 MB has the INCI name of Cetearyl Alcohol & Cetearyl Glucoside.

It is non-ionic, and works in pH ranges of 3-10 making it pretty versatile for use in a range of different products.

For those following the HLB system it has an HLB of 10.

It employs liquid crystal technology, producing lamellar layers which mimic the lipid layers of the skin.

We couldn't wait to get our hands dirty and experiment with this emulsifier! It is really well known overseas but as many of you know, sometimes it can be a little hard to source interesting and functional ingredients in South Africa due to the high cost of shipping. So we were particularly excited to be able to get this emulsifier in stock.

When we experiment with new and unknown products we generally choose to make KISS formulations. KISS stands for Keep It Super Simple. When we have no experience working with ingredients the best way to learn is to use them in simple formulations to see how they behave, how they work with other ingredients, what they give to a product and how they feel on the skin.

Instructions on how to use Montanov 68 MB:

Recommended usage rate: 2-8%

Melt with the other oil phase ingredients to 75 degrees C, then add the heated water phase into the heated oil phase and emulsify with high shear (eg. a stick blender) for 1-2 minutes. Reduce speed and stir by hand once emulsion forms. Add preservative to cool down phase.

Since the recommended usage rate was 2-8%, we designed three KISS formulas to see how differing percentages of this emulsifier performed.

3% emulsifier, 15% oil

5% emulsifier, 20% oil

8% emulsifier, 30% oil

KISS formulas are simply the emulsifier, oil and water. We don't even bother with adding in a humectant, gum or preservative because it's just an experiment.

You can add in a gum for stability in cases where very little emulsifier is used and the formula runs the risk of splitting, but I actually like to play without it and test the limits before adding in a stabiliser.

Once you know how it plays then you can add in things like butters to adjust viscosity and feel, actives to make your formulation actually do something, a preservative for shelf life, etc.

Method & Results

Variant 1: 3% [Montanov 68 MB](#), 15% [sunflower oil](#), 82% water

Method: heat water, melt emulsifier into oil, add water into oil, stir until cool down.

Results: lotion-like, soft cream consistency. Barely any soaping effect when rubbed in, rich skin feel.

Face feel: pretty quickly absorbed, lighter but moisturised feel.

Variant 2: 5% [Montanov 68 MB](#), 20% [sunflower oil](#), 75% water

Method: heat water, melt emulsifier into oil, oil into water*, stir until cool down

*Note this is different to the recommended instructions, but I didn't notice any difference in stability or end results. Meaning you can probably add oil to water or water oil.

Results: rich, soft skin feel, whipped cream texture, minimal soaping effect.

Face feel: lovely and soft and moisturised. This could be a really nice facial moisturiser for night time.

Variant 3: 8% [Montanov 68 MB](#), 30% [sunflower oil](#), 62% water

Method: heat water, melt emulsifier into oil, water into oil, stir until cool down.

Results: very very thick cream texture. Very rich skin feel. Slower absorbing. Almost similar to a barrier cream. In fact I think addition of a little wax or butter and it would be exactly like a barrier cream.

Good for very dry skin, mature skin, babies.

Face feel: this is a very rich and rather slow absorbing cream. Would make a very nice ultra moisturising night cream.



From left to right: Variant 1, Variant 2, and Variant 3. This shows their differences in consistency and texture.

General Observations

Montanov 68 MB is extremely simple to work with. In fact I struggle to see how anyone could mess this up! It's a matter of melting the emulsifier into the oil phase and blending with hot water for a minute, then stirring the emulsion until cool. This makes it very beginner-friendly and perfect for anyone to use. It makes rich emulsions for a rich moisturised skin feel and medium absorption speed. It really does give excellent moisturisation and my skin felt amazing afterwards. This is due to its liquid crystal technology, which produce lamellar layers that mimic the lipid layers of the skin.

Montanov 68 MB makes beautiful white, scentless creams and lotions. It has no scent of its own so if you wanted a scent you would need to add in an essential oil.

I think it would be particularly excellent for those with dry skin or mature skin.

It can work well as an emulsifier in a hair conditioner too.

If you are looking for an ultra light, fast absorbing lotion then I would stick with Eco E wax, which I personally find to be the fastest absorbing. But if you want something a little richer yet still well

absorbed, even without adding a butter, then Montanov is perfect!

I would recommend this for beginners, even over Eco E wax and the Olive Ms. It is incredibly user friendly.

You can achieve a wonderful cream/lotion with a very low usage rate and no stabiliser (which is often required for other emulsifiers), making this emulsifier rather economical. [Eco E Wax](#) is still the cheapest by a long shot, but it's pretty much a basic emulsifier and nothing more. For a more high-end emulsifier that creates liquid crystal structures and has moisturising effects, Montanov 68 MB is really nice and comes in much cheaper than the Olive Ms.

This emulsifier gives a high-end, luxurious feel to a moisturiser, even with the most basic of formulations and no special ingredients added. I think it would make the most excellent emulsifier for all kinds of amazing lotions and creams.

Tips On Working With Montanov 68 MB

Don't over mix it! It only needs a few seconds to a minute of high shear to form the emulsion, then hand stir it until cool down.