



Formulation

No. 4016

Natural Mineral Sunscreen

DESCRIPTION

This formulation features **PolySuga®Mulse D6** and **Colonial Monolaurin** for a broad spectrum mineral based SPF 30 protection for ultimate sun coverage. Made up of 100% natural moisturizers, it's non-whitening, and dry to the touch.

FORMULATION

Order	INCI Name	Trade Name	%
A	Water		qs to 100.00
A	Xanthan Gum	Keltrol® CG-SFT ¹	1.00
A	Glycerin		2.00
A	Sorbitan Oleate Decylglucoside Crosspolymer	Poly Suga®Mulse D6	4.00
A	Glyceryl Laurate	Colonial Monolaurin	0.75
B	Zinc Oxide and Titanium dioxide and Caprylic/capric triglyceride and Polyhydroxystearic acid and Alumina and Stearic acid	Xperse® 301 ²	30.00
B	Cetyl Alcohol	Lanette® 16 ³	5.00
B	Coco-Caprylate	Cetiol® C5 ³	5.00
C	Fragrance		0.20
C	Phenoxyethanol and Ethylhexylglycerin	Euxyl® PE 9010 ⁴	0.50

PROCEDURE

1. Combine xanthan gum and glycerin to create a smooth slurry. Add the slurry to water, mixing until completely hydrated.
2. Add remaining phase A ingredients.
3. In a separate vessel, combine phase B ingredients.
4. Heat both phases to 75 – 85°C.
5. Once at temperature, add phase B to phase A.
6. Homogenize and cool to 45°C.
7. Add remaining ingredients.

TYPICAL PROPERTIES

Appearance Opaque
pH 7.5 – 8.0
Viscosity 50,000 cps

SUPPLIERS

¹CP Kelco, ²Umicore, ³BASF, ⁴Schülke & Mayr

ACTIVE INGREDIENTS

Zinc Oxide 9.0%

Colonial Chemical, Inc. *Natural Surfactants*

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Titanium Dioxide 7.0%

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