



RayMilk

Sunscreen SPF20*
FDA Approved UV Filters 6-NG-147

FORMULATION DETAILS

A lightweight milky sunscreen that glides effortlessly and delivers comfortable protection while leaving skin soft and naturally radiant.

FEATURED INGREDIENTS

- **Aristoflex SUN** – Creates lightweight milky texture with stable UV filter distribution
- **Plantasens Emulsifier HP 49** – Plant-derived emulsifier that maintains fluid texture while integrating UV filters and skin moisture

PROPERTIES

- **pH value** 5.30
- **Appearance** Off-white to slightly yellow lotion
- **Stability** 12 weeks (-5°C, 2°C, 25°C, 45°C,UV and Cycle)
- **Challenge Test** Pass A
- **SPF (calculated)* 20**

*SPF calculated using DSM Sunscreen Optimizer

AMERICAS

PHASE	INGREDIENT	INCI	%W/W
A	Water	Aqua	to 100.00
	Glycerin	Glycerin	4.00
B	Aristoflex SUN	Ammonium Acryloyldimethyltaurate/Beheneth-25 Methacrylate Crosspolymer (and) Sodium Polyacryloyldimethyl Taurate	0.30
C	Isopropyl Myristate	Isopropyl Myristate	10.00
	Hostaphat KL 340D	Trilaureth-4 Phosphate	2.00
	Plantasens Emulsifier HP 49	Cetearyl Alcohol (and) Sorbitan Stearate (and) Cetearyl Glucoside (and) Disodium Cetearyl Sulfosuccinate	3.00
	Plantasens Olive LD	Hydrogenated Ethylhexyl Olivatate (and) Hydrogenated Olive Oil Unsaponifiables	1.80
	Avobenzone	Butyl Methoxydibenzoylmethane (Avobenzone)	3.00
	Homosalate	Homosalate (Homosalate)	10.00
	Octocrylene	Octocrylene (Octocrylene)	5.00
	Octisalate	Ethylhexyl Salicylate (Octisalate)	5.00
D	Rootness Mood+	Propanediol (and) Sanguisorba Officinalis Root Extract	1.00
	Nipaguard SCE Vita	Sorbitan Caprylate (and) Propanediol (and) Benzoic Acid	1.00
E	Citric Acid	Citric Acid	pH 5.0-6.0

PROCEDURE:

1. Combine ingredients in phase A under low shear until homogenously mixed

2. Add B slowly to A and stir until the polymer is fully hydrated
After a homogenous gel is formed, heat it to 80 °C

3. In a separate beaker, combine ingredients of phase C and heat to 80 °C
4. Add C to A-B and stir under high shear until homogenous

5. Allow to cool down while stirring under low shear

6. Add D below 40 °C and stir until homogenous

7. Finally adjust pH with E to 5.0 – 6.0