

# Light Sunscreen Lotion with Beeswax

Formula # 2/19-402/358/421-7

## Features

- Optimum combination of natural and synthetic waxes for maximum SPF boost.
- Elegant, non-whitening lotion.
- Suitable for face and body.

Skin Care

Emulsion

Traditional Ingredients

Sunscreen

## Formula

### Kostol PGP

Non-ionic o/w emulsifier. Provides a quick break and light feel, without affecting viscosity. Designed for multiple formula types, wide pH tolerance. Usage level 2-6%.

### Beeswax

Natural wax produced by honeybees. Multifunctional; excels at making anhydrous formulas soft and pliable, and making emulsions glossy, thick and with excellent pickup. Structurant, plasticizer, thickener.

### Kester Wax K-24

Naturally derived wax ester of plant origin. Low melt point semi-solid, melts on body contact, provides cooling sensation. Adds slip, reduces greasy feel, dimethicone alternative. Usage level up to 50%.

Trade Name	INCI Name	%
<i>Phase A</i>		
Deionized Water	Aqua	53.05
Disodium EDTA	Disodium EDTA	0.05
Optiphen <sup>2</sup>	Phenoxyethanol, Caprylyl Glycol	1.0
Glycerin	Glycerin	5.0
Keltrol CG-SFT <sup>3</sup>	Xanthan Gum	0.3
<i>Phase B</i>		
Kostol PGP <sup>1</sup>	Polyglyceryl-3 Stearate, Beheneth-5	3.0
Beeswax <sup>1</sup>	Beeswax	1.0*
SynKos 2050 <sup>1</sup>	Synthetic Wax	1.0
Kester Wax K-24 <sup>1</sup>	Lauryl Laurate	3.0
Escalol 587 <sup>2</sup>	Ethylhexyl Salicylate	5.0
UV Cut TiO2-55-CG <sup>4</sup>	Titanium Dioxide, Caprylic/Capric Triglyceride, Stearic Acid, Alumina, Polyhydroxystearic Acid	5.5
UV Cut ZnO-68-CG <sup>4</sup>	Zinc Oxide, Caprylic/Capric Triglyceride, Polyhydroxystearic Acid	22.1

\* For different sensorial properties, consider replacing beeswax with **Enhans SB-63** or **Enhans CY-62**.

## Procedure

- Mix Phase A ingredients one at a time until uniform (premix glycerin and xanthan gum), while heating to 80-85°C.
- Combine Phase B ingredients and mix and heat to 80-85°C until uniform.
- Add Phase B to Phase A and homogenize at 4000-5000 rpm at 80-85°C.
- When emulsion is smooth, cool slowly at low speed to RT.

### Stability Information:

Three months at 45 °C, three months at room temperature, three freeze/thaw cycles.

### Supplier Information:

1. Koster Keunen, Inc.; 2. Brenntag Specialties; 3. CP Kelco ; 4. Grant Industries

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