

SPF 32 Balanced Sunscreen with

Formula KSL-160A

Methyl Trimethicone



Kobo Products - formulations

Part	Percent	Ingredients	INCI Name	Supplier
1	27.00	MTM3F40T7	Methyl Trimethicone (And) Titanium Dioxide (And) Alumina (And) Hydrogen Dimethicone (And) Lauryl PEG-9 Polydimethylsiloxyethyl Dimethicone	Kobo Products
	2.50	ABIL® Care 85	Bis-PEG/PEG-16/16 PEG/PEG 16/16 Dimethicone (And) Caprylic/Capric Triglyceride	Evonik
2	53.80	Deionized Water	Water	
	1.00	Glycerin U.S.P. Natural 96%	Glycerin	Univar USA Inc.
	0.20	Crillet 4HP	Polysorbate 80	Croda
3	1.00	Glycerin	Glycerin	Cognis Corp.
	1.00	Butylene Glycol	Butylene Glycol	Ruger Chemical Co., Inc.
	0.35	Nomcort ZZ	Xanthan Gum	The Nisshin Oil Mills, Ltd.
	0.15	Natrosol HHX-250	Hydroxyethyl Cellulose	Hercules-Aqualon
4	10.00	Tinosorb® M	Methylene Bis-Benzotriazolyl Tetramethylbutylphenol	Ciba Specialty Chemicals
5	2.20	Aculyn™ 44	PEG-150/Decyl Alcohol/SMDI Copolymer	Rohm & Haas
	0.80	Germaben® II	Propylene Glycol (And) Diazolidinyl Urea (And) Methylparaben (And) Propylparaben	ISP

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Manufacturing Procedure

This is entirely a cold process procedure based on the strong emulsifying properties of ABIL® Care 85.

- In a suitable stainless steel tank equipped with a lightening type propeller mixer and side sweep action, mix Part 1 ingredients together.
- In Part 2 mix Polysorbate 80 and Glycerin first, and then add water, while mixing between additions.
- Add Part 2 to Part 1 with homogenization. Homogenize until uniform and a milky white emulsion forms.
- Mix Part 3 ingredients together (wet powders) and add to Parts 1 and 2 with mixing. Mix until it thickens.
- Add Part 4 to Parts 1, 2 and 3 with mixing. Mix until homogeneous.
- Add Part 5 to Parts 1, 2, 3 and 4 with mixing. Add one item at a time, mixing between additions.

Description

This UV Balanced Sunscreen formulation is an elegant O/W white emulsion with exceptional "feel". Kobo's Attenuation grade, volatile non-D5, Titanium Dioxide Dispersion, MTM3F40T7, used in combination with Tinosorb® M provides a balanced UV protection.

Tinosorb® cannot be used in the USA.

Notes

Active Ingredient(s)	Percentage
Titanium Dioxide	8.50%
Tinosorb M	10.00%

SPF testing: in vivo on 3 subjects

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Formulations

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The Powder & Dispersion Specialist

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