

Kobo Hybrid Sunscreen

Formula KSL-1380



Kobo Products - formulations

Part	Percent	Ingredients	INCI Name	Supplier
1	44.10	Deionized Water	Water	
	1.00	Liposorb® L-20	Polysorbate 20	Lipo Chemicals
2	1.50	Propylene Glycol	Propylene Glycol	Symrise
	0.30	Keltrol® CG	Xanthan Gum	CP Kelco
3	15.00	Neo Heliopan® HMS	Homosalate	Symrise
	11.80	DAIAMID MSP-Ti50	Nylon-12 (And) Titanium Dioxide	Daicel-Evonik/Kobo Products
	10.00	Neo Heliopan® OS	Ethylhexyl Salicylate	Symrise
	3.00	Lipo® GMS 450	Glyceryl Stearate	Lipo Chemicals
	3.00	Neo Heliopan® BB	Benzophenone-3	Symrise
	3.00	Neo Heliopan® 357	Butyl Methoxydibenzoylmethane	Symrise
	2.00	Lipomulse® 165	Glyceryl Stearate (And) PEG-100 Stearate	Lipo Chemicals
	2.00	Ceraphyl® 368	Ethylhexyl Palmitate	ISP
	0.50	Lipowax® D	Cetearyl Alcohol (And) Ceteareth-20	Lipo Chemicals
	0.50	Covi-ox® T-50	Tocopherol	Cognis Corp.
	0.30	Liposorb® TS	Sorbital Tristearate	Lipo Chemicals
	4	1.00	Botanistat PF-64	Phenoxyethanol (and) Caprylyl Glycol (and) Ethylhexylglycerin (and) Hexylene Glycol
5	1.00	Aculyn™ 44	PEG-150/Decyl Alcohol/SMDI Copolymer	Rohm & Haas

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Manufacturing Procedure

1. In main kettle, combine Part 1 ingredients and heat to 78-80°C.
2. Add Part 2 to Part 1 and mix until uniform.
3. Combine Part 2 ingredients and heat to 80°C. Mix until uniform using propeller mixer.
4. Combine Part 3. Heat to 80°C and add to batch with propeller mixing.
5. Add Part 4 while cooling.
6. Homogenize for approximately 2 minutes at 4000 rpm.
7. Add Part 5 to batch.
8. Homogenize for approximately 1 minute at 4000 rpm.
9. Cool batch to 30°C.

Description

This high SPF and high PFA sunscreen contains DAIAMID MSP-Ti50, which has ultrafine Titanium Dioxide entrapped in a Nylon-12 sphere for SPF and and great feel.

Notes

Active Ingredient(s)	
Homosalate	15.00%
Butyl Methoxydibenzoylmethane	3.00%
Benzophenone-3	3.00%
Titanium Dioxide	5.00%
Ethylhexyl Salicylate	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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