

W/O Sunscreen Lotion TG23-SUV

Sunscreen lotion incorporating **PRODEW™ 700** for skin caring benefits.

AMIHOPE™ SB-101 enhances UV protection effect and sensory feelings such as less stickiness.

	Trade Name	INCI Name	wt%	Function
A	Tinosorb S *1	Bis-Ethylhexyloxyphenol Methoxyphenyl Triazine	2.0	UV absorber
	Uvinul A Plus Granular *1	Diethylamino Hydroxybenzoyl Hexyl Benzoate	2.0	UV absorber
	Uvinul T-150 *1	Ethylhexyl Triazone	3.0	UV absorber
	Ultimo Pure Crodamol TN *2	Isotridecyl Isononanoate	7.0	Emollient
	NIKKOL DIS *3	Diisopropyl Sebacate	8.0	Emollient
	DOWSIL ES-5612 Formulation Aid *4	PEG-10 Dimethicone	1.5	Emulsifier
	CITHROL DPHS *2	PEG-30 Dipolyhydroxystearate	2.0	Emulsifier
	Polyaqual OS2 *5	Polyglyceryl-2 Oleate, Polyhydroxystearic Acid, Polyglyceryl-2 Stearate	2.0	Emulsifier
	BENTONE GEL ISD-V *6	Isododecane, Disteardimonium Hectorite, Propylene Carbonate	8.0	Thickening agent
	Permethyl99a *7	Isododecane	7.0	Emollient
B	Ultimo Pure Crodamol TN *2	Isotridecyl Isononanoate	5.0	Emollient
	DOWSIL ES-5612 Formulation Aid *4	PEG-10 Dimethicone	1.0	Dispersing agent
C	STR-100C-LP *8	Titanium Dioxide, Aluminum Hydroxide, Hydrogen Dimethicone	2.5	UV scattering agent
	FINEX 33W-LP2 *8	Zinc Oxide, Hydrated Silica, Hydrogen Dimethicone	2.5	UV scattering agent
D	AMIHOPE™ SB-101	Silica, Microcrystalline Cellulose, Lauroyl Lysine	2.0	SPF booster Sensory improver
E	1,3-BG	Butylene Glycol	6.0	Humectant
	PRODEW™ 700 (50%)	Sodium PCA, Sodium Polyaspartate, Butylene Glycol, Betaine, Zinc PCA, Sodium Citrate, Arginine, Serine, Lysine HCl, Glutamic Acid, Water	2.0	Skin conditioning, Moisturizer, Sebum control, Adhesion improver
	Magnesium Sulfate	Magnesium Sulfate	0.5	Stabilizer
	Preservative	Preservative	q.s.	Preservative
	Water	Water	balance	Solvent
Total			100	

*1 BASF, *2 Croda, *3 Nikko Chemicals, *4 Dow, *5 Innovacos, *6 Elementis, *7 Nihon Koken Kogyo, *8 Sakai Chemical Industry

<PROCEDURE>

- Mix part B uniformly, then add part C and mix by hand, and disperse part (B+C) with a roller mill 3 times.
- Add part A and part D into part (B+C).
- Heat and dissolve part (A+B+C+D) at 75 °C with a homogenizing mixer (1,000 rpm), then cool to 60 °C.
- Heat and dissolve part E at 55 °C.
- Slowly add part E into part (A+B+C+D) with stirring and mix with a homogenizing mixer (3,000 rpm) at 55 °C, then cool to 40 °C or less.
- Cool to r.t by stirring with a paddle mixer (150 rpm).

<PHYSICAL PROPERTIES and STABILITY>

Appearance : Fluid
 Viscosity : 1,090 mPa·s (B-Type, Rotor No. M4, 60 rpm, 30 sec.)
 Stability : -5°C, 5°C, 25°C, 40°C, 50°C, Cycle(0 ~ 45°C), 3 Months



In-vitro SPF value: 85.4

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