

All-mineral Natural SPF 30 Sunscreen Lotion O/W

A non-greasy transparent sunscreen lotions that is easily absorbed.

Based on Cosmos certified Eclipse Z1 as single UV filter

Formula #UT001

	INCI	Trade Name	%
A	Sucrose Palmitate	Sisterna PS750-C (Sisterna)	2.50
	Sucrose Tristearate	Surfhope SE Cosme C-1803 (Mitsubishi Kagaku Foods)	1.00
	Glyceryl Stearate	Cutina GMS (BASF)	1.25
	Tocopheryl Acetate	Vitamin E Acetate (BASF)	0.50
B	Caprylic/Capric Triglyceride	Myritol 318 (BASF)	5.00
	Coco-Caprylate	Cetiol C5 (BASF)	10.00
	Polyhydroxystearic Acid	Dispersun DSP-OL100 (Innospec)	0.60
	Zinc Oxide	Eclipse Z1 (Uviva Technologies)	20.00
C	Citric Acid	Citric Acid (ACEF)	0.50
	Glycerin	Glycerin (Gamma Chimica)	0.50
	Sodium Stearoyl Glutamate	Eumulgin SG (BASF)	0.20
	Xanthan Gum	Smoothflow (Jungbunzlauer)	0.50
	Panthenol	Panthenol 75W (BASF)	0.20
	Benzyl Alcohol, Dehydroacetic Acid	Isocide BAS (Lehvoss)	0.50
	Sodium Phytate	GreeGard PA3 (Green Line)	0.20
	Aqua	Water	to 100

Performance

Sunscreen performance

In-vitro ISO-24443 - Helio 2

SPF	32
UVA-PF	15
Critical wavelength	372 nm

In-vivo ISO-24444

SPF -

HDRS

SPF -

UVA-PF -

Critical wavelength -

FDA

UVA-I/II ratio 0.91

Stability

40°C - 3M Stable

Centrifuge Stable

Procedure

1. Prepare phase B by combining Caprylic/capric triglyceride, Coco-caprylate and heat to 80-85°C
2. Add Polyhydroxystearic Acid and mix until dissolved.
3. Add Eclipse Z1 and disperse well for several minutes (e.g. homigenizer) until smooth
4. Add ingredients of Phase A to B and stir well.
5. Prepare water phase C by adding citric acid glycerin to water and mix well.
6. Add Eumulgin SG and mix thoroughly.
7. Slowly add oil phase (A+B) to water phase C and emulsify until smooth emulsion is obtained.
8. Add xanthan gum and mix until smooth.
9. Add remaining ingredients one by one, then cool down.
10. Add fragrance when desired.