

All-mineral Natural SPF 30 Sunscreen Lotion W/O

A transparent and easy to rub-in sunscreen with a soft-touch after feel

Based on Cosmos certified Eclipse Z1 as single UV filter

Formula #UT002

	INCI	Trade Name	%
A	Polyglyceryl-4 Diisostearate, Polyhydroxystearate, Sebacate	Isolan GPS (Evonik)	2.50
	Magnesium Stearate	MgStearate (ACEF)	0.50
	Vitamin E Acetate	Vitamin E Acetate (BASF)	0.50
B	Coconut/Palm kernel alkenes	Eutraderm Penta (EuroTrading)	5.00
	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
	Magnesium Sulphate	MgSO4 (ACEF)	0.50
	Panthenol	Panthenol 75W (BASF)	0.20
	Benzyl Alcohol, Dehydroacetic Acid	Isocide BAS (Lehvoss)	0.50
	Sodium Phytate	Dermofeel PA3 (Evonik)	0.20
	Aqua	Water	to 100

Performance

Sunscreen performance

In-vitro ISO-24443 - Helio 2

SPF	33
UVA-PF	15
Critical wavelength	372 nm

In-vivo ISO-24444

SPF	-
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HDRS

SPF	-
UVA-PF	-
Critical wavelength	-

FDA

UVA-I/II ratio	0.91
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Stability

40°C - 3M	Stable
Centrifuge	Stable

Procedure

1. Prepare phase B by combining Coconut/Palm Kernel Alkanes, 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. homogenizer) until smooth
4. Add ingredients of Phase A to B and stir well.
5. Prepare water phase C by adding citric acid and glycerin to water and mix well, then add the remaining ingredients.
6. Slowly add water phase C to oil phase (A+B) to and emulsify until smooth emulsion is obtained.
7. Add fragrance when desired.