

Formulation Example

MDA-S-041-17

Protect & Reflect | Natural Sunscreen

SPF 30, UVA

Ingredients	Art. No.	INCI EU	[%]
A2			
Eusolex® Z-TEC	1.32428 (1)	ZINC OXIDE (NANO)	14.00
Eusolex® T-PURE	1.05947 (1)	TITANIUM DIOXIDE (NANO), ALUMINA, SILICA	6.00
A1			
Arlacel™ 1689 V	(2)	SORBITAN OLEATE, POLYGLYCERYL-3 POLYRICINOLEATE	6.00
Imwitor® 600	(3)	POLYGLYCERYL-3 POLYRICINOLEATE	3.00
Pelemol® PHS-8	(4)	POLYHYDROXYSTEARIC ACID	2.00
Myritol® 318	(5)	CAPRYLIC/CAPRIC TRIGLYCERIDE	9.00
Cetiol® OE	(5)	DICAPRYLYL ETHER	9.00
Eutanol® G	(5)	OCTYLDODECANOL	4.00
Jojoba Oil pressed organic	(6)	SIMMONDSIA CHINENSIS SEED OIL	3.00
Covi-Ox® T-90 EU C	(7)	TOCOPHEROL	0.50
Antaron™ Soja Glyceride	(8)	MALEATED SOYBEAN OIL GLYCERYL/OCTYLDODECANOL ESTERS	2.00
A3			
Magnesium Stearate	(8)	MAGNESIUM STEARATE	0.70
Kahlwax 2039L	(9)	CANDELILLA CERA	1.00
B			
Sodium Chloride		SODIUM CHLORIDE	0.70
Glycerol anhydrous (vegetable)		GLYCERIN	5.00
Sodium Gluconate	(10)	SODIUM GLUCONATE	0.15
Water, demineralized		AQUA	ad 100
C			
Cosphaderm® Propanediol natural	(11)	PROPANEDIOL	4.25
Preservative			q.s.

Procedure:

Combine phase A1 & A3 and heat to 75-80°C, Disperse phase A2 in phase A1/A3. Homogenize.

Heat phase B separately to 75°C (adjust pH to 7,1-7,3 with NaOH -water phase B should be clear).

Add phase B slowly at 75°C to phase A while stirring. Homogenize. Cool down to 35°C while stirring. Add phase C, and cool down RT.

Notes:

Appearance: white lotion

Viscosity: approx 6000mPa.s (Brookfield RV DV-I PRO, Helipath spindle C, 10 rpm) at 23 °C

Stability: 3 months at 40 °C, FTC (5 °C to +40 °C), 5 °C, room temperature and 1 week at 50 °C

NOI (DIN ISO 16128) = 98,6

Suppliers:

Formulation Example

(1) Susonity Commercial GmbH, Germany and/or its affiliates
(3) IOI Oleo GmbH
(5) BASF AG
(7) Azelis Germany GmbH
(9) Kahl GmbH & Co. KG
(11) Cosphatec GmbH

(2) Croda
(4) Phoenix Chemical, Inc.
(6) Henry Lamotte Oils GmbH
(8) Barentz GmbH
(10) Jungbunzlauer GmbH

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