



Zemea® Propanediol Natural Emulsion with Phytocream® 2000

Phase	Trade/drug name	INCI name	Supplier	Wt.%
A	Deionized water	Aqua	—	75.65%
	Zemea® propanediol	Propanediol	CovationBio PDO	3.00%
B	Phytocream® 2000	Potassium palmitoyl hydrolyzed wheat protein, glyceryl stearate, cetearyl alcohol	Sinerga	5.00%
	Sunflower seed oil	Helianthus annuus seed oil	Henry Lamotte	8.00%
	Palmerol® 1698	Cetyl alcohol	KLK Oleo	2.00%
	Cetiol OE	Dicaprylyl ether	Cognis	4.00%
	Dermofeel® Toco 70	Tocopherol, helianthus annuus seed oil	Dr. Straetmans	0.05%
B ₁	Aromatic Tangerine Extract H0826	Caprylic/capric triglyceride, citrus tangerina extract, limonene	Carrubba	1.00%
C	Geogard 221	Dehydroacetic acid, benzyl alcohol, water	Lonza	0.80%
D	Citric acid (solution 20%)	Citric acid	—	0.50%
Total				100.00%

Prototype formulation provided by: Biesterfeld Spezialchemie GmbH., Zagreb, Croatia

Procedure

- Mix phase A and heat up to 75°C.
- Heat phase B to 75°C and add phase B1 shortly before emulsifying.
- Emulsify phase B to phase A under stirring. Homogenize for 1 - 2 minutes.
- Cool down to 40°C under stirring at moderate speed and add phase C.
- Continue stirring at moderate speed and cool down to room temperature.
- Adjust pH with phase D.

Product features

- Appearance: white emulsion pH: 5.5 - 6.0
- Viscosity: ~ 20.000 mPas (Brookfield DV-II: spindle 6, speed 10)
- Storage stability: 3 months at RT, 40°C, 4°C