



Zemea® propanediol moisturizer

| Phase | Trade/drug name | INCI name | Supplier | Wt.% |
|----------------|---------------------------|--|--|-------------------------|
| A | Sesame oil | Sesame oil | — | 20.00% |
| | Grapeseed oil | Grapeseed oil | — | 10.00% |
| | Canola oil | Canola oil | — | 9.00% |
| | Eldew SL-205 | Isopropyl lauroyl sarcosinate | Ajinomoto USA, Inc | 5.00% |
| | Eldew PS-306 | Phytosterol beheny/octyl dodecyl/lauroyl glutamate | Ajinomoto USA, Inc | 3.80% |
| | Cetearyl alcohol | Cetearyl alcohol | — | 3.00% |
| | Squalane | Squalane | — | 1.00% |
| | Vitamin E | Alpha-tocopherol | — | 0.50% |
| B ₁ | Deionized water | Water | — | 37.40% |
| B ₂ | Hyalo Oligo | Hydrolyzed hyaluronic acid | QP Corporation (Distributed by Ajinomoto USA, Inc) | 0.10% |
| B ₃ | Vanzan | Xanthan gum | RT Vanderbilt | 0.30% |
| | Ajldew NL-50 | Sodium PCA | Ajinomoto USA, Inc | 1.00% |
| C | Zemea® propanediol | Propanediol | CovationBio PDO | 5.00% |
| D | Amlsoft HS-11P | Sodium stearoyl glutamate | Ajinomoto USA, Inc | 2.90% |
| E | Preservative | — | — | 1.00% |
| F | — | Citric acid | — | qs to pH 5.5 +/- 0.2 |
| Total | | | | 100.00% |

Prototype formulation provided by: Ajinomoto USA, Inc. Fort Lee, New Jersey

Procedure

1. Combine A and heat to 78°C with mixing.
2. In batch vessel, charge B1 and heat to 78°C with good mixing, preferably using homogenization.
3. Slowly dust in B2 and B3. Allow to mix at 78°C until completely hydrated and uniform.
4. Add B4 and mix until uniform.
5. Add C to batch vessel. Add D to batch vessel.
6. Add E to batch vessel, all maintaining mixing and 78°C.
7. Add A to batch vessel and allow to mix at 78°C for 20 minutes. Cool. At 50°C add F. Cool to room temperature and adjust pH.

Product features

1. Appearance: black, viscous paste pH: 6.5-7.5
2. Viscosity: approx. 50000 mPas (Brookfield DVII: spindle 7, speed 10)
3. Stability: stable for more than 3 months at 20°C, 40°C and 4°C