The information presented herein is intended to illustrate the possible technical applications of our products. However, since the use of this information and our products is beyond our control, any recommendations or suggestions are made without guarantee of warranty in each country and particularly in the absence of patent rights. We recommend that the user ensures that this product is in compliance with the local regulations in force, particularly in the country where the finished product is to be consumed. It is the responsibility of the user to comply with the patents and the regulations in force.

**Phase** | **Trade Name** | **INCI** | **Supplier** | **% WT**
---|---|---|---|---
A | Deionized Water | Water | - - - - | q.s. |
 | Versene® Na2 Crystals Chelating Agent | Disodium EDTA | The Dow Chemical Co. | 0.05 |
 | Butylene Glycol | Butylene Glycol | Making Cosmetics | 2.0 |
 | Sulfochem® EA-2 Surfactant | Ammonium Laureth Sulfate | The Lubrizol Corporation | 14.5 |
 | Chembetaine® C Surfactant | Cocamidopropyl Betaine | The Lubrizol Corporation | 13.0 |
 | Glucaminate® DOE-120 | PEG-120 Methyl Glucose Dioleate | The Lubrizol Corporation | 2.0 |
B | Hallstar TAB-2V | Distearyl Phthalic Acid Amide | The HallStar Company | 4.5 |
 | Lanette® 16 | Cetyl Alcohol | BASF Corporation | 4.0 |
 | Vegarol® 1898 | Stearyl Alcohol | Essential Ingredients | 4.0 |
C | Sodium Hydroxide, ACS Grade (15% Solution) | Sodium Hydroxide (and) Water | VWR International LLC | q.s. |
D | Citric Acid (30% solution) | Citric Acid (and) Water | Cargill Beauty | q.s. |
E | Preservative† | - - - - | - - - - | q.s. |
F | Ecobeads Jade² | Stearyl Stearate (and) Euphorbia Cerifera (Candelilla) Wax (and) Jojoba Esters | Cargill Beauty | 6.00 |

This facial scrub featuring Ecobeads gently exfoliates, leaving the skin feeling smooth and refreshed. Ecobeads are low-cost, biodegradable scrubbing beads made of natural waxes that are proven to exfoliate as effectively as polyethylene. Due to their spherical shape, Ecobeads are gentler than polyethylene and other natural exfoliants, and therefore result in the decreased appearance of erythema and barrier disruption during exfoliation. Ecobeads are available in many colors and are ideal for formulators seeking a natural biodegradable exfoliative positioned for value.

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† Preservative: Phenonip® (INCI: Phenoxyethanol (and) Methylparaben (and) Ethylparaben (and) Butylparaben (and) Propylparaben (and) Isobutylparaben) supplied by Clariant Corporation

² Any color or combination of colors may be used.
GENTLE FACE SCRUB WITH BIODEGRADABLE ECObEADS
with Ecobeads® (page 2)

PROCESS
1. Add the Versene Na2 Crystals Chelating Agent to the deionized water with moderate propeller agitation and mix until completely dissolved.
2. While heating to 75-80°C, add the remaining ingredients of Phase A in the order listed with moderate propeller agitation.
3. In a separate vessel, mix all ingredients of Phase B. While heating to 75-80°C, mix with moderate propeller agitation until uniform.
4. Add Phase B to Phase A with rapid propeller agitation at 75-80°C.
5. Add Phase C to Phase AB with rapid propeller agitation at 75-80°C to achieve pH 6.5 - 7.5.
6. Cool Phase ABC to 45-50°C.
7. Add Phase D to Phase ABC with moderate propeller agitation at 45-50°C to achieve pH 4.8 - 5.0.
8. Add Phase E to Phase ABCD at 40-45°C and cool to room temperature.
9. Add Phase F when the batch has cooled to room temperature.

CHARACTERISTICS
- **pH:** 4 - 6
- **Viscosity:** 113 - 253kcP

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