**NATURAL MOISTURIZING CREAM**

**FORMULATION #012-122**

**TECHNOLOGY SHOWCASE**

**Product Type**

Cream

**Market Focus:**

Women, Men, Child and Baby

**Function:**

Moisturize  
Repair

**Skin Types:**

All

**Contact Us:**

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403.668.6685

For more information please visit  
www.botaneco.com

**METHOD**

Formulation Method: Modified cold process

**SNAP SHOT**

Natural moisturizer formulated with Hydresia® Oleosome technology as the primary emulsifier! Replace all chemically modified emulsifiers in your formulation with all-natural oleosomes, while improving the aesthetics and skin feel of your formula!

Hydresia® SF2 emulsifies typical vegetable oils at a ratio of 1:3 in most emulsion systems, allowing you to meet most cost targets.

**KEY INGREDIENTS**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Wt%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PHASE A</strong></td>
<td></td>
</tr>
<tr>
<td>DI Water</td>
<td>QS</td>
</tr>
<tr>
<td>Bentonite (Vanatural, RT Vanderbilt)</td>
<td>2.500</td>
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<tr>
<td><strong>PHASE B</strong></td>
<td></td>
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<tr>
<td>Carthamus tinctorius (Safflower) oleosomes + water (Hydresia® SF2)</td>
<td>5.000</td>
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<tr>
<td>Myristyl Myristate</td>
<td>5.000</td>
</tr>
<tr>
<td>Carthamus tinctorius (Safflower) oil (Safflower Oil, Chemistry Store)</td>
<td>4.000</td>
</tr>
<tr>
<td>Isopropyl Myristate</td>
<td>2.000</td>
</tr>
<tr>
<td>Shea Oil</td>
<td>2.000</td>
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<tr>
<td>Cetyl Alcohol</td>
<td>2.000</td>
</tr>
<tr>
<td><strong>PHASE C</strong></td>
<td></td>
</tr>
<tr>
<td>Xanthan Gum (Vanzan NF, RT Vanderbilt)</td>
<td>0.800</td>
</tr>
<tr>
<td><strong>PHASE D</strong></td>
<td></td>
</tr>
<tr>
<td>Gluconodeltalactone/Sodium Benzoate (Geogard Ultra, Lonza)</td>
<td>1.500</td>
</tr>
</tbody>
</table>

**PROCEDURE**

1. Homogenize Phase A until dispersed while heating to 65C. Hold temperature.
2. Under propeller blade, heat Phase B to 65C. Hold temperature.
3. Homogenize Phase B for 4-5 minutes at 2000rpm maximum at 65C.
4. Add Phase B to Phase A and emulsify under homogenizer for 15 minutes at 2000rpm maximum. Hold temperature.
5. Add Phase C and homogenize until dispersed while keeping temperature between 60C and 65C.
6. Cool under propeller blade to 30C. Add Phase D and mix until dispersed and uniform.
7. Adjust pH to 5.3-5.7.
8. pH will drop and batch will thicken overnight

**SPECIFICATIONS**

Viscosity RVTC Spindle 2 = 30-50K cPs  
PH range = 5.2-5.7  
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