The Powerful O/W Emulsifier with thickening & sensory enhancing capacities

**Origin:**
- INCI: Hydroxypropyl starch phosphate & Sodium starch octenylsuccinate
- Optimized & patented complex of the hydrophilic starch, hydroxypropyl starch phosphate, (HP) that thickens the water phase & the lipophilic starch, sodium octenyl succinate starch (n-OSA), which stabilizes the emulsion at the oil-water interphase

**Traceability & sustainability:**
- Based on waxy corn 100% from Europe
- Sourcing is verified externally and benchmarked Silver against the Sustainable Agriculture Initiative (SAI) Platform in order to protect the soil and the biodiversity as well as to improve the water usage and quality.

**Uniqueness:**
- Triple function: emulsion stabilizer at the oil-water interface, thickener of the water phase & sensory enhancer
- Primary emulsifier or co-emulsifier for low or high 5-60% of oil content of all polarities
- Richness during application
- Smooth & cocooning after feel
- No soaping effect
- Competitive cost-in-use

**Technical data:**
- Dose of use 1-6%
- White powder form
- Non-ionic
- Cold/Hot processable
- Dispersible in water
- pH range: 4-7

**Compatibility:**

<table>
<thead>
<tr>
<th>Preservative</th>
<th>EUXYL® K903 1%</th>
<th>EUXYL® K712 1.2%</th>
<th>EUXYL® PE901 1%</th>
<th>NATSOFT® SCB 1.3%</th>
<th>SPECTRASTAT™ 1%</th>
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</thead>
<tbody>
<tr>
<td>INCI</td>
<td>Benzyl Alcohol, Benzoic Acid, Dihydracetic Acid, Tropolone</td>
<td>Sodium Benzoate, Potassium Sorbate, Aqua</td>
<td>Phenoxethanol, Ethyhexyglycerin</td>
<td>Sorbitan Caprylate, Propanediol, Benzoic Acid</td>
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<tr>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
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<table>
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<tr>
<th>NaCl %</th>
<th>0</th>
<th>2</th>
<th>pH</th>
<th>4</th>
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<td>+</td>
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Applications

StarDesign™ Power

When to use StarDesign™ Power?

- To emulsify up to 60% of oil content and texturize the water phase with the same ingredient
- To emulsify whatever the formulation conditions: oil polarity, pH, electrolytes
- To uncover a full texture range with smooth sensory profile: no soaping effect and non-sticky
- To have a competitive cost in use emulsifier

Textures:
- Lotion
- Cream
- Butter
- Mask
- Sensory fingerprint: soft, cocooning, fast absorbing

Formulation tips

As a primary emulsifier (oil content >30%)

- Slow addition of the oil (intermediary)
- Homogenization at 4000 rpm Rotor stator

As a primary emulsifier (oil content <30%): concentrated & cold process

- Slow addition of the oil
- Homogenization 4 min at 4000 rpm Rotor stator

Cold process in combination with lecithin (or other co-emulsifier)

- Homogenization 4 min at 4000 rpm Rotor stator

Product details

- CAS N° Sodium Starch Octenylsuccinate 66829-29-6
- Hydroxypropyl Starch Phosphate 53124-00-8
- Packaging: 20 kg (net) paper bags hermetically sealed
- Shelf life after production date (months): 24
- IECIC listed

Contact us at: beauty@cargill.com

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