Consumer Solutions

DOWSIL™ EP-9801 Hydro Cosmetic Powder

Enhanced Sensor and Functional Performance
DOWSIL™ EP-9801 Hydro Cosmetic Powder combines the well-known sensory and functional benefits of an elastomer powder with the ability to be readily dispersed in any water phase without the need of an oil phase.

- Dispersible in both water and oil
- Sebum and oil absorption
- Stability (even in low-viscosity water systems)
- Optical effects:
  - Mattifying for decreased shine
  - Soft focus to help mask imperfections
- Superior aesthetics:
  - Smooth, powdery feel
  - Spreadability and slipperiness

INCI: Dimethicone/Vinyl Dimethicone Crosspolymer (and) Butylene Glycol (and) Silica

Adding Value to Life
A new, simple-to-use water-dispersible silicone elastomer powder

Consumers want it all from skin care, color cosmetics and sun care products. They want light creams, lotions, gels, toners, liquid foundations and color cosmetics that feel great during and after application — with a slippery, smooth, powdery feeling. They also want excellent performance, like good oil and sebum absorption for a reduced-shine, matte finish and optical effects that help mask wrinkles and other imperfections.

DOWSIL™ EP-9801 Hydro Cosmetic Powder can help you create products that meet everyone’s checklist. This free-flowing powder is made water-dispersible through treatment with butylene glycol.

An Elastomer Powder That Can Be Added Directly into the Water Phase
DOWSIL™ EP-9801 Hydro Cosmetic Powder is easy to disperse in water without the use of surfactants or high-shear devices. The powder can be added directly to the water phase without making a premix in another fluid. And it is stable — even in low-viscosity water systems.

Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Appearance</td>
<td>White powder</td>
</tr>
<tr>
<td>Average particle size</td>
<td>3–10 µm</td>
</tr>
<tr>
<td>Active content</td>
<td>100%</td>
</tr>
<tr>
<td>Bulk density</td>
<td>0.2–0.5 g/cm³</td>
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<tr>
<td>Hardness (JIA)</td>
<td>40</td>
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<tr>
<td>Shelf life</td>
<td>540 days</td>
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</tbody>
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Formulation Flexibility
This innovative silicone elastomer powder can be added directly into the water phase in formulations such as liquid foundations, water-in-oil creams, oil-in-water creams, lotions, gels and toners.

DOWSIL™ EP-9801 Hydro Cosmetic Powder is easy to use. Just pour and mix in water (Figure 1). Solution stability can be optimized by adjusting the viscosity using thickeners, or the solution density. Glycerin can be used to adjust the water density. It can also be post-added to an existing formulation.

Sensory Benefits
DOWSIL™ EP-9801 Hydro Cosmetic Powder has the same sensory profile compared to an existing silicone elastomer powder, DOWSIL™ 9701 Cosmetic Powder, for parameters such as spreadability, powdery feel, slipperiness and smoothness. These sensory benefits can now be obtained by simply adding the new DOWSIL™ EP-9801 Hydro Cosmetic Powder to an existing formulation, as shown in Figure 2.

Added Functionality
DOWSIL™ EP-9801 Hydro Cosmetic Powder absorbs sebum, oil and other fluids to help provide a mattifying effect on the skin.

When using a cream containing 10% DOWSIL™ EP-9801 Hydro Cosmetic Powder and organic sunscreen, there is a visually significant decrease in the shine on the skin — even six hours after application (Figure 3). (The test site used 0.02 g/cm² cream on the forehead.) The powder also has soft focus properties that translate into the ability to help mask skin imperfections (Figure 4).

How can we help you today?
When you need industry-leading innovation, Dow can help. DOWSIL™ solutions are dedicated to meeting your needs for specialty materials, collaborative problem solving and innovation support. Learn how we can help you bring BEAUTY WITH IMPACT to your products at consumer.dow.com.