**SPHERILEX® DP-0112**

**DESCRIPTION**
- SPHERILEX® DP-0112 is a precipitated amorphous (crystalline-free) silica with uniquely spherical particle shape and very narrow particle size distribution.
- SPHERILEX® products are available with different particle sizes, but all grades are based on a new patented synthesis process that directly controls particle morphology during the precipitation step. As a result, this new range of silica products provides a unique balance of performance benefits.
- SPHERILEX® DP-0112 has larger particle size, which is beneficial for properties like burnish and scrub resistance and may produce some degree of matting effect in certain systems, such as thin film applications and waterborne clear finishes.

**KEY BENEFITS**
- excellent mar and burnish resistance
- excellent washability and scrub resistance
- low viscosity at high loading levels
- very low binder demand
- very low water/solvent demand in the grind process

**EFFECT**
- Mar and burnish resistance
- Washability and scrub resistance
- Gloss reduction
- Smooth Surface Profile

**SUITABILITY**
- solventborne
- direct grind
- waterborne
- not suitable
- partly suitable
- suitable

**TYPICAL APPLICATIONS**
- Architectural paints
- Decorative coatings
- Floor coatings
- Wood coatings

**TECHNICAL DATA**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery form</td>
<td>free-flowing powder</td>
</tr>
<tr>
<td>DOA absorption</td>
<td>45 ml/100g</td>
</tr>
<tr>
<td>Loss on drying</td>
<td>5 %</td>
</tr>
<tr>
<td>Particle size, $d_{50}$</td>
<td>10 µm</td>
</tr>
<tr>
<td>Particle size, $d_{95}$</td>
<td>20 µm</td>
</tr>
<tr>
<td>pH value, 5% in water</td>
<td>7.5</td>
</tr>
<tr>
<td>Sodium sulfate content</td>
<td>&lt;1.0 %</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>2.0 g/cm³</td>
</tr>
<tr>
<td>Specific surface area ($N_2$)</td>
<td>6 m²/g</td>
</tr>
</tbody>
</table>

**RECOMMENDED ADJUSTMENT LEVEL**
- As supplied calculated on pigment: 15 - 25 %
- As supplied calculated on total formulation: 3 - 10 wt-%

**PROCESSING INSTRUCTIONS**
It is recommended that this product be added, as supplied, to the grind.

**HANDLING & STORAGE**
24 months when stored in original unopened package in clean, dry conditions. Evonik silica products are inert and extremely stable, chemically. SPHERILEX® silicas have very low surface area, however, precipitated silica can absorb moisture and volatile organic compounds from the surrounding atmosphere. Therefore, we recommend storage in original sealed packaging in a dry, cool place and removed from volatile organic substances. Even if a product is stored under these conditions, over periods of time the material may still pick up enough moisture to exceed the moisture content that is specified "as packaged" or at the time of packaging.

**MSDS & REGULATORY INFORMATION**

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