FLO-GARD™ FF-D anti-caking agent is an amorphous silicon dioxide specifically designed for fine particle-sized food ingredients. Flo-Gard FF-D silica absorbs high level of oils and fats, and produces an excellent free-flowing product.

Properties and Characteristics
Flo-Gard FF-D silica is an anti-caking agent specifically designed for finer particle-sized food ingredients. Flo-Gard FF-D silica provides a combination of small particle and high absorbency. The typical median particle size of Flo-Gard FF-D silica, 18 microns by Laser Diffraction, permits better coverage of fine particle-sized food ingredients. The high absorbency of Flo-Gard FF-D silica helps keep ingredients with high levels of fat or oil, free-flowing. Flo-Gard FF-D is hydrated silica, with a neutral pH, and is odorless and tasteless, making it compatible with a variety of ingredients.

<table>
<thead>
<tr>
<th>Flo-Gard FF-D — Typical Properties</th>
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<tbody>
<tr>
<td>Particle Size, μm</td>
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<tr>
<td>DOA Oil Absorption Number, mL/100g</td>
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<tr>
<td>pH</td>
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<tr>
<td>Moisture (as packaged), Wt.%</td>
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<tr>
<td>Residual salt (as Na₂SO₄), Wt.%</td>
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</tbody>
</table>

Applications
- Fine salt products
- Spices and seasonings
- Powdered sugar products
- Chocolate powders
- Dairy and non-dairy creamers
- Powdered drink mixes
- Tabletting applications
Flo-Gard FF-D silica is highly porous, so it quickly absorbs liquids and oils in the food ingredients preventing caking. Flo-Gard FF-D silica is designed to provide more particles per unit weight of flow agent providing excellent partitioning. This is important for improving flowability, especially with fine particle-sized food ingredient. Flo-Gard FF-D silica generates low dust during handling, because the small particle form loose agglomerates that settle quickly when scooped or dumped for the bad into the mixer. Flo-Gard FF-D silica disperses very easily when mixed into food ingredients.

**Anti-caking, Partitioning, Low Dust**

Flo-Gard FF-D silica is very hydrophilic, absorbing moisture quickly. In most case, Flo-Gard FF-D silica will absorb moisture from the atmosphere more readily than a food ingredient preventing caking of the food product.

**Preferential Moisture Absorption**

For the latest safety and regulatory information, please reference the product Safety Data Sheet and Global Product Safety and Regulatory Information Sheet available at [www.ppgsilica.com/SDS](http://www.ppgsilica.com/SDS).

**Packaging**

Standard packaging as follows:

- Multi-wall paper: 20 lb (9 kg) and 44 lb (20 kg) net weight
- FIBC: 600 lb (272 kg) net weight

Bags are unitized for shipping on pallets which are stretch wrapped with clear plastic film. Please consult with customer service or your sales representative regarding additional packaging options, including custom package sizes and bulk shipments.

Visit [www.ppgsilica.com](http://www.ppgsilica.com) for more information.