



# FLO-GARD™ AB-D

## Flow Conditioning Silica

FOOD

FLO-GARD™ AB-D silica is a synthetic silicon dioxide with distinct, superior characteristics over other conventional free-flow additives for powdered food ingredients. *Flo-Gard* AB-D silica absorbs high levels of oils or fats, and produces a fine, free-flowing powder. Uniform shape and size promote easy blending and thorough dispersion. Higher bulk density reduces blending time, and increases batch size for improved cost performance.

### Properties and Characteristics

Custom designed as a carrier of hard-to-handle liquids, (including viscous and sticky materials), *Flo-Gard* AB-D silica is manufactured by a controlled process yielding silicon dioxide particles with a typical median particle size of 40 microns by Laser Diffraction. It is amorphous in structure and highly porous, with a typical DOA oil absorption number of 310 ml/100 g. *Flo-Gard* AB-D silica is an ultra-fine powder that is pure white in color, is odorless and tasteless, and has a neutral pH.



### Applications

Treated grain  
Batter mixes  
Bread conditioners  
Dried egg yolks  
Dehydrated soup mixes  
Milk substitutes  
Cheese powders  
Artificial sweeteners  
Pepper and spices



### *Flo-Gard* AB-D – Typical Properties

Particle Size, µm	40
DOA Oil Absorption Number, mL/100g	310
pH	6.9
Moisture (as packaged), Wt.%	4.0
Residual salt (as Na <sub>2</sub> SO <sub>4</sub> ), Wt.%	2.0 maximum

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## Samples

Samples are available upon request from Customer Service.

## Storage

To ensure product integrity, PPG recommends that our silica products be stored under dry, clean conditions and protected against exposure to other substances. Since silica may pick up moisture, we also recommend that products that are stored for more than one year from the date of manufacture be re-tested for moisture content. There is no shelf life limit when stretch-wrapped palletized units or bags are kept under the above stated conditions. Pallets should not be double-stacked.

## Safety and Health Effects

PPG Industries recommends that, before use, anyone using or handling this product thoroughly read and understand the information and precautions on the label, as well as in other product safety publications such as the Safety Data Sheet. Any health hazard and safety information contained herein should be passed on to your customers or employees, as the case may be. The products mentioned herein can be hazardous if not used properly. Like all potentially hazardous materials, this product must be kept out of the reach of children.



## Efficient Blending

*Flo-Gard* AB-D silica does not agglomerate, making processing easier. The controlled manufacturing process gives *Flo-Gard* AB-D silica a uniform particle size. This characteristic provides easier blending for the user, eliminating the need for preblending or pretreatment. The unique flow characteristics allow *Flo-Gard* AB-D silica powder to be metered directly into the process stream, mixer, or spray dryer.

## High Absorption

*Flo-Gard* AB-D silica particles have a large surface area with a highly porous, uniform structure for maximum absorption. Hard-to-handle liquids (including viscous and sticky) can be easily converted to free-flowing powders. *Flo-Gard* AB-D conditioner also blends homogeneously, allowing the natural color of the food to be retained not diminished.

## Product Safety and Regulatory Information

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

35 lb (16 kg) net weight

Bags are unitized for shipping on pallets which are stretch wrapped with clear plastic film. Please consult with PPG Silica Products 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.

### USA

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