



## Product Information

# SYLOID<sup>®</sup> 244 FP Silica for Food and Pharmaceutical Applications Made in USA

## Product Description

SYLOID<sup>®</sup> 244 FP product is synthetic amorphous silica appearing as white free-flowing powder. It meets the test requirements for silicon dioxide as described in the latest edition of United States Pharmacopoeia/National Formulary (USP/NF), for silica, dental type, as described in the latest edition of the European Pharmacopoeia (EP), and for hydrated silicon dioxide as described in the latest edition of Japanese Pharmaceutical Excipients (JPE). SYLOID<sup>®</sup> 244 FP product also meets the test requirements in the latest editions of the Food Chemical Codex (FCC), Japan's Specifications and Standards for Food Additives (D325), and European Directive (EU) No. 231/2012 for E551.

## Product Characteristics

The following specification parameters will be stated in our Certificate of Analysis.

Property	Unit	Value	Test Method
Loss on Drying @ 145°C	Wt %	5.0 max.	GRA 1702
Loss on Ignition @ 1832°F	Wt %	8.5 max.	GRA 1701
Silica (SiO <sub>2</sub> )	Wt %	99.4 min.	GRA 1260
pH (5% Slurry)		5.0-8.3	GRA 1200
Color (L-Value)		97 min.	GRA 1432
Sulfate (SO <sub>4</sub> )	Wt %	0.1 max.	GRA 1260
Chlorides (Cl)*	Wt %	0.10 max.	GRA 1231
Mercury (Hg)*	ppm	≤ 1	GRA 1251
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )*	ppm	≤ 2000	GRA 1260
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )*	ppm	≤ 400	GRA 1260
Sodium Oxide (Na <sub>2</sub> O)*	ppm	≤ 2000	GRA 1260
Calcium Oxide (CaO)*	ppm	≤ 1400	GRA 1260
Arsenic (As)*	ppm	≤ 1.52	GRA 1250
Heavy Metals*	ppm	≤ 20	GRA 1250
Lead (Pb)*	ppm	≤ 4.5	GRA 1250
Sodium Sulfate (Na <sub>2</sub> SO <sub>4</sub> )	Wt %	≤ 5.0%	GRA 1260

\*Testing is performed on a monthly basis in accordance with USP/NF Guidelines for reduced frequency testing.

## Typical Properties and Recommended Applications

The following typical properties data is given for informational purposes only and is not to be interpreted as product or in-process specifications. To receive further product and handling information, please contact our local sales office.

Property	Unit	Value	Comments
Oil Absorption	g/100g	240	
Apparent Bulk Density	g/cc	0.07	
Compacted Bulk Density	g/cc	0.10	

SYLOID<sup>®</sup> 244 FP silica is a high pore volume silica gel with large internal surface area. It has a strong affinity for moisture and organic based liquids. SYLOID<sup>®</sup> 244 FP silica can absorb up to 1.6 ml of liquid per gram. This product is particularly recommended as a glident, tableting aid and carrier for pharmaceutical and personal care products. It has excellent compatibility with active ingredients.

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### **Packaging Information**

SYLOID® 244 FP silica is supplied in bags packed on pallets.

North America Manufacturing:

30 lb/bag (13.61 kg)

15 bags/pallet

450 lb/pallet

### **Handling & Storage Recommendations**

Like all other finely powdered products, SYLOID® 244 FP silica has a tendency to develop dust. During handling, precautions should be taken against electrostatic discharges. Additional information can be found in our Material Safety Data Sheet (MSDS). Storage in a dry warehouse is recommended. Open packages should be resealed to prevent contamination of the product. The material should be used within 12 months from the date of production. Provided the storage recommendations are followed, silica stored beyond the recommended shelf life are typically fit for use. However, it is advised that a quality control test is performed on the properties relevant to the application.

### **Health & Safety Information**

SYLOID® 244 FP silica is synthetic, amorphous silica. Additional information can be found in our Material Safety Data Sheet (MSDS). Please refer also to national laws and regulations.

### **ISO Certification**

SYLOID 244FP silica is manufactured in a facility with its Quality Management System certified to both ISO 9001 and The IPEC-PQG Good Manufacturing Practices Guide for Pharmaceutical Excipients.

### **Other Information**

The information contained herein is based on our testing and experience and is offered for the user's consideration, investigation and verification. Since operating and use conditions vary and since we do not control such conditions, we must **DISCLAIM ANY WARRANTY, EXPRESSED OR IMPLIED**, with regard to results to be obtained from the use of this product. Test methods are available on request.

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