

## Speciality Silica

### ■ Hydrophobic Silica JS-681/682

As a mixed organic-inorganic material hydrophobized with organic dressing agent in the precipitated solution, the hydrophobic precipitated silica we produce has the following characteristics: high surface activity, low hygroscopicity, enhanced dispersibility in organic medium and excellent polymer compatibility. And it also has the rheological capability to adjust the polar system, add the transparent/semi-transparent characteristics for rubber products.

- Applications of hydrophobic precipitated silica
- Rheological agent: separant for emulsion, anti-settling agent for paints/coatings/inks/toners, thickening agent, thixotropic agent, anti-block agent for plastic film;
- Powder glidant: for powder extinguishing agent and powder coats;
- Granula agent and dispersion agent for pesticides;
- Carrier for explosive;
- Thickening agent for Adhesives and various kinds of polar liquid like epoxy resin;
- Defoaming agent;
- Abrasive agent for tooth paste;
- Reinforcing agent for organic silica elastomer;

With the hydrophobic and anti-corrosion characteristics, the hydrophobic precipitated silica can also enhance the insulating property for cables and cords. And with the high reinforcement, the hydrophobic precipitated silica is widely used in the industrial plastic, modified plastic and silicon rubber.

#### JS 681/682 hydrophobic silica

Properties	JS-681	JS-682
SiO <sub>2</sub> %	≥90	≥90
Powder brightness 白度	≥95	≥95
Loss on drying (2Hrs,105℃)加热减量 %	≤2.0	≤2.0
Ignition loss 1000℃灼烧减量 %	≤7.0	≤7.0
pH value (10%aqueous suspension) PH 值	6.0-8.0	6.0-8.0
Tap density 振实密度 g/ml	≤0.2	≤0.2
BET specific surface areaBET 比表面积 m <sup>2</sup> /g	170-210	130-170
DBP absorption value DBP 吸收值 ml/g	1.5-2.5	1.5-2.5
Soluble salt (Na <sub>2</sub> SO <sub>4</sub> )水可溶物 %	≤1.0	≤1.0
Average Particle size 粒径 Micron	5.5-6	5.5-6

## ■ Hydrochloric Acid Silica

Properties	Hydrochloric Acid Process 盐酸法
SiO <sub>2</sub> (Dry Basis) 二氧化硅(干基)	≥96
Loss on drying (2Hrs, 105°C) 加热减量 %	4.0-7.0
Ignition loss 1000°C 灼烧减量 %	≤7.0
pH value (10%aqueous suspension) PH 值	6.0-7.0
BET specific surface area BET 比表面积 m <sup>2</sup> /g	180-220
Fe content 总铁含量 mg/kg	≤500
DBP absorption value DBP 吸收值 ml/g	1.8-2.2
Soluble salt (Na <sub>2</sub> SO <sub>4</sub> ) 水可溶物 %	≤1.0

## ■ Large Pore Volume Silica

- With large pore volume up to 500m<sup>2</sup>/g, this products is specially for flattening agent for paints, coatings, inks.

Properties	Large pore volume A 大孔容 A	Large Pore Volume B 大孔容 B	Large Pore Volume C 大孔容 C
SiO <sub>2</sub> (Dry Basis)二氧化硅(干基)	≥97	≥97	≥97
Loss on drying (2Hrs,105°C)加热减量 %	≤5.5	≤5.5	≤5.5
Ignition loss 1000°C灼烧减量 %	≤6.0	≤6.0	≤6.0
pH value (10%aqueous suspension) PH 值	6.0-7.0	6.0-7.0	6.0-7.0
BET specific surface areaBET 比表面积 m <sup>2</sup> /g	200-300	300-400	400-500
Fe content 总铁含量 mg/kg	≤400	≤400	≤400
DBP absorption valueDBP 吸收值 ml/g	2.5-2.8	2.4-2.7	2.3-2.5
Soluble salt (Na <sub>2</sub> SO <sub>4</sub> )水可溶物 %	≤0.5	≤0.5	≤0.5

■ **Low Pore Volume Silica JS-150**

Properties	JS-150
SiO <sub>2</sub> (Dry Basis) 二氧化硅(干基)	≥96
Loss on drying (2Hrs,105℃) 加热减量 %	4.0-7.0
Ignition loss 1000℃ 灼烧减量 %	≤7.0
pH value (10%aqueous suspension) PH 值	6.0-7.0
BET specific surface area BET 比表面积 m <sup>2</sup> /g	100-150
Fe content 总铁含量 mg/kg	≤500
DBP absorption value DBP 吸收值 ml/g	0.8-1.2
Soluble salt (Na <sub>2</sub> SO <sub>4</sub> ) 水可溶物 %	≤1.0