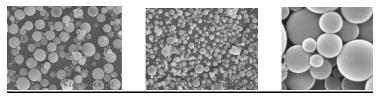
Spherical Fused Silica Powder



1. Application

SINOSI GROUP face the global market to supple the SSP series of spherical fused silica powder which own monodispersion, smooth surface, good fluidity and low thermal expansion coefficient and other characteristics. In view of these characteristics, spherical silica powder can be widely used in large-scale and super-large- scale integrated circuit packages and Insulating pouring of electronic components and high voltage devices. It is also applied to high-class rubber tires, silastic, silicon-based substrate materials, high-grade ink, Coating material, sealants, adhesives, electronic ceramics, optic lithium niobate crystal, engineering plastic enhancement, functional plastic film, broaching light-guide fiber, dental materials, cosmetic and chemical, pharmaceuticals and environmental protection. It is obvious that spherical silica powder has to be the most important basic material in the high technology area.

2. Technique Data

It's smaller average particle size to determine their good smoothness;

Its narrow size distribution to determine its good liquidity and touch;

It's a larger Specific surface area to have a good absorption, can be used to flavor, nutrients and protection chemicals.

Spec.: SiO₂: 99.95% (min)

Size: D50: 1-10µm (according to user's demand)

Packing: 25kg / barrel

Analysis Report

ITEM	UNIT	SSP - I	SSP-II	SSP-III	SSP-IV	SSP-V
Size: D ₅₀	μm	10±2	7.0±1	4.0±1	2.5±0.5	1.0±0.5
Size: D _{max}		45	30	15	10	5

SiO₂ content		99.95	99.95	99.95	99.95	99.95
H ₂ O content	%	0.05	0.05	0.05	0.05	0.05
percent of		>98	>98	>98	>98	>98
spheroidization						
Specific surface	M ² g ⁻¹	1.0	1.5	1.7	1.9	9.0
area						
Na		<10	<10	<10	<10	<10
к	ppm	<2	<2	<2	<2	<2
Са		<3	<3	<3	<3	<3
Mg		<1	<1	<1	<1	<1
AI		<50	<50	<50	<50	<50
Fe		<10	<10	<10	<10	<10
Ti		<10	<10	<10	<10	<10
As		<1	<1	<1	<1	<1
Р		<1	<1	<1	<1	<1
Cr		<1	<1	<1	<1	<1
Mn		<1	<1	<1	<1	<1
Ni		<1	<1	<1	<1	<1
Cu		<1	<1	<1	<1	<1
Мо		<1	<1	<1	<1	<1
U	ppb	<0.3	<0.3	<0.3	<0.3	<0.3

If you are interested in above product and need detail specification, please feel free to contact us.

3. Packing

One Kraft paper barrel: 25kg/barrel

One woven bag and Kraft paper lining: 25kg/bag

- 4. Application field
 - 4.1 Electronic packaging



Spherical silica powder is used for fillers can greatly enhance products rigid, wear resistance, weather resistance, shock resistance, resist compression, tensile property, flame resistance, favorable arc resistance dielectric properties and anti-UV. Using spherical silica powder filled resin epoxy molding compound own many useful factors which includes small thermal conductivity, small coefficient of thermal conductivity, low expansion coefficient. It means that spherical silica powder is used as microelectronics substrate and components of filling rate can reach 90%, and can be used as a large-scale, vlsi ideal substrate materials and packaging materials

4.2 Electronic ink

It has a good fluidity and lubricative, it can achieve better suspension and dispersion stability, less pigment but high hiding power, good gloss, resin with fine particle size, , thin and continuous film, so that the printing of the pictures are clear.



4.3 Raw materials of light-guide fiber

Spherical fused silica powder has a smooth surface, large surface area, hardness, chemical stability, thermal expansion coefficient is small, scrolling is good, excellent



mechanical properties, and other unique properties. With the development of electric industry, it supply new requirements which need superfine, high purity and low radioaction. Spherical silica powder own high dielectric, high heat, high humidity, high filler

content, low expansion, low stress, low impurities, low friction coefficient, excellent performance and a high quality raw material for making optical fibers

4.4 Raw materials of cosmetics

Spherical silica made from an innovative technology and method. It can obtain a narrow particle size distribution and large surface area. Spherical silica have unique properties

as follows:

It's smaller average size determine that it has good smoothness;

It's a narrow particle size distribution decided its good liquidity and texture;

It's big volume determines the cosmetics formula to be more economic. This feature also let it own great absorption function which can use for spices, nutrients and protection chemicals.



Meanwhile, spherical silica is also used for lipstick, pressed powder,

and foundation because spherical silica have benign disperity and intermiscibility which is good for our skin. What's more, great hydrophobicity can strength makeup long-lasting.

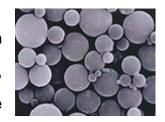
4.5High-class ceramics



High purity spherical silica powder is an important functional materials with useful factors: chemical stability, acid, well-developed porosity, large surface activity, low oil absorption, high temperature, thickening and strong, good electric insulation, anti-ultraviolet properties, and their special structure. It had four major effects and these effects make synthetic materials different from traditional materials which do not have the physical and chemical properties. To use of these features, it can improve traditional materials, but also generate new material. For example, high strength, super-hard, high toughness, superplastic materials and insulation materials, electrode materials and superconducting materials, special low-temperature sintering refractory heat exchange materials such as high-tech and new materials

4.6 Optical fiber cable gel thickener

Due to the infiltration of water and moisture, it will result in deterioration of the transmission performance of fiber optic cable, or even can not use. In order to prevent the intrusion of moisture



and friction between the optical fiber made of fiber damage, in addition to filling the gap

of the optical fiber cable ointment, but also need optical fiber coated with ointment. The Company may replace the use of high purity spherical silica imported raw materials, so it is not only low cost, but also the performance index has reached the level of imports of similar products

4.7Precision Grinding Powder

High purity spherical silica powder is widely used in optical devices and optoelectronic



industry, precision grinding, especially for grinding, polishing semiconductor single crystal silicon chip, glass screen CRT glass, optical glass, liquid crystal display (LCD, LED) glass substrates, piezoelectric quartz crystal, compound semiconductor materials

(gallium arsenide, indium phosphide), magnetic materials such as semiconductor industry

4.8 Paint

It has a mono-dispersed, surface smoothness, good fluidity, low coefficient of thermal

expansion characteristics. It meets or exceeds every adopted highway safety marking sphere standard in effect today. Consistent in quality and composition, Our spherical silica powder provide excellent durability and nighttime retro reflectivity. And it has been sold to more than 30 countries in the world.



5. Contact us

If you are interested in the product or need more information, please contact us via the following ways:

TEL: (86-10) 82070680; 82070681; 82070682; 82070683 Ext.661 FAX: (86-10) 82070690; 82079576 Contact person: *Rachel Young* Mobile:0086-1511-020-2304 E-Mail: <u>yangcl@sinosi.net</u>