



方石英 Cristobalite

产品描述 Description

Cristobalite powder is made of selected vein quartz ore calcined at about 1500 °C, processed by non-polluting grinding, magnetic separation and classification.

The properties are stable, the silica content is about 99%, the crystalline phase is tetragonal, the hardness is about 6.5, the density is 2.35, large specific surface, high porosity, good weather resistance, good precipitation resistance, good thermal shock resistance .

应用领域 Application areas

It is used in artificial stone, jewelry casting, electronic chip polishing, polishing materials, building interior and exterior wall coatings, road reflective coatings, automotive primers, adhesives, electronic epoxy packaging material industry, precision casting (casting powder) industry, high-grade coating industry, high-grade paint industry, tire rubber, high-grade filler in silicone rubber industry, engineering plastics, sealant, dental material industry, daily chemical industry, high-grade electronic ceramic industry, high-grade ceramic industry, special ceramic filler industry, special fire resistance industry, Shielding material industry, electronic wafer polishing, polishing material industry, all kinds of industrial protective coatings, powder coatings, inks and other functional applications.

主要特征 Main features



1. Excellent optical properties. The refractive index of cristobalite decreases from 1.55 to 1.48, which is closer to that of PE, PP and some resins. The blended resin is transparent and does not cover the color of the pigment itself, while filling with other fillers will make the color of the pigment lighter and distorted.

2. High reflectivity. The concrete structure of cristobalite can help light reflection and replace glass beads as reflective paint. It can not only enhance the anti-skid property, but also improve the reflectivity of paint.

3. High whiteness, low density and bright color. The whiteness of cristobalite is over 95%. It can replace part of titanium dioxide and reduce the cost of formulation when used in coatings and paints.

4. Corrosion resistance, scratch resistance and scrubbing resistance.

5. It does not contain organic pollution and has very low metal content. It can enhance the UV resistance of the coating and has good insulation.

6. Excellent thermal shock resistance. When quartz is heated at 220 - 240 C, a certain degree of thermal expansion occurs, which compensates for the shrinkage of epoxy resin and gypsum during curing reaction at this temperature, so that the casting body does not deform.




产品规格表 SPECIFICATION SHEET

Item	Unit	Standard Scope	Typical Values					
Appearance	-	White powder	400mesh	600mesh	800mesh	1000mesh	1250mesh	1500mesh
SiO ₂	%	98.5%-99.7%	99.3	99.21	99.1	99	99	99
Mean Grain size	μm	2-25	17.45	11.56	10.21	9.56	6.99	5.79
Whiteness	%	95-99	96	97	98	98.5	98.8	98.9
Fe ₂ O ₃	%	≤0.03	0.01	0.01	0.01	0.01	0.01	0.01
Burning Vector	%	< 0.1	0.07	0.07	0.07	0.07	0.07	0.07
PH Value		6.5-8.0	7.2	7.2	7.2	7.2	7.2	7.2
Moisture	%	< 0.2	0.08	0.08	0.08	0.08	0.08	0.08
Cristobalite	%	90-96	91	91	91	91	91	91
BET(SSA)	kg/m ²	-	394.5	482.8	618.5	646.1	665.2	698.7
Density	g/cm ³	2.35	2.35	2.35	2.35	2.35	2.35	2.35
Moh's hardness		5-7	6	6	6	6	6	6
Melting Point	°C	1718	1718	1718	1718	1718	1718	1718

We can produce 325-5000 mesh powder products with different specifications according to customer requirements and have cristobalite sand in 40-120mesh .

转化率检测报告 Conversion Rate Test Report

Pattern List #1

Icon	Index	Name	Compound Name	Formula	I/c DB	S-Q
	3	PDF 71-0261	Tridymite	Si O ₂	1.370	6.7%
	2	PDF 33-1161	Quartz, syn	Si O ₂	3.600	1.7%
	1	PDF 82-1403	Cristobalite β, syn	Si O ₂	5.020	91.6%

Density
2.260 g/cm ³
2.656 g/cm ³
2.323 g/cm ³



System	Space Group
Triclinic	F1 (1)
Hexagonal	P321 (154)
Tetragonal	P41212 (92)

a
9.93200 Å
4.91340 Å
4.97800 Å

b	c	alpha
17.21600 Å	81.86400 Å	90.000 °
	5.40530 Å	
	6.93210 Å	

beta	gamma
90.000 °	90.000 °

Pattern List #1

Icon	Index	Name	Compound Name	Formula	I/c DB	S-Q
	2	PDF 71-0261	Tridymite	Si O ₂	1.370	4.0%
	1	PDF 82-1403	Cristobalite β, syn	Si O ₂	5.020	96.0%

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Tetragonal	P41212 (92)

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beta	gamma
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