

Functions



Amorphous Spherical Silica Powder with Pore Inside

SILNOS

Product Information

- INCI Name: Silica
- Substance Name: Silicon Dioxide
- CAS No.: 7631-86-9
- EC List No.: 231-545-4

Applications

Skin Care



Makeup



Point Makeup



Sun Care



Baby Powder



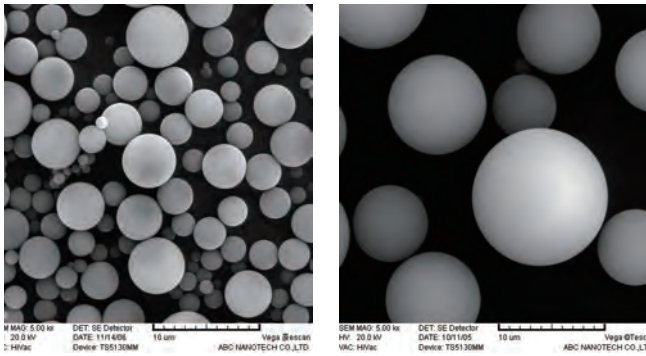
Deodorant



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Product Images



Features

- Makes sensory experiences
- Reduces tackiness of formulations
- Enhances fluidity and spreadability
- Improves lubricity of cosmetics on the skin
- Absorbs sebum and perspiration
- Keeps fresh feeling longer
- Releases liquid sustainedly
- Has excellent chemical and thermal stability
- Covers defects and wrinkles
- Prevents greasiness
- Diminishes the look of sharp makeup lines
- Approved raw materials by ECOCERT

SILNOS is an inorganic powder for the use in cosmetics. It is developed by the special sol-gel technology of ABC NANOTECH. There are several factors of SILNOS properties that affect the texture of cosmetic formulations. They are particle size, porosity, and chemical structure.

• Texture by particle size

Smaller	←	→	Bigger
Better adhesion	←	→	Better ball bearing

• Texture by porosity

Less pore	←	→	More pore
Creamier	←	→	Fresher

Well developed pores inside of SILNOS help cosmetic formulation control the sebum or perspiration. The chemical structure of SILNOS makes it well discrete and hard. Another important function of SILNOS is light scattering effect. Particle size and porosity exhibit different optical performances.

• Optical property by particle size

Smaller	←	→	Bigger
Hazier	←	→	Natural looking

• Optical property by porosity

Less pore	←	→	More pore
Hazier	←	→	Natural looking

Smaller particle size and less pore of SILNOS is highly recommended for the cosmetics to cover skin defects. Bigger particle size and more pore of SILNOS is better for the natural looking makeup products.

Guide Formulation: O/W Sun Care (SPF 41 PA++)

Phase	Product Name	INCI Name	wt%
A	TiO2 407 AS	CI 77891, Triethoxycaprylylsilane	7.80
	ZINC OXIDE N AS	CI 77947, Triethoxycaprylylsilane	2.05
	TALC JA 13R AS	Talc, Triethoxycaprylylsilane	10.00
	TALC JA 46R	Talc	29.26
	RHEOSIL 1107Q	Vinyl Dimethicone/Methicone Silsesquioxane Crosspolymer	1.00
	ARTPEARL K-7P	Methyl Methacrylate Crosspolymer	3.00
	SERICITE J AS	Mica, Triethoxycaprylylsilane	13.00
	SILNOS 160TE	Silica, Triethoxycaprylylsilane	6.00
	MICA SSA	Dimethicone, Mica	8.00
	SILNOS 350	Silica	5.00
	OTS-2 YELLOW 3 AS	Iron Oxides, Triethoxycaprylylsilane	0.50
	OTS-2 RED 3 AS	Iron Oxides, Triethoxycaprylylsilane	0.16
	OTS-2 BLACK 3 AS	Iron Oxides, Triethoxycaprylylsilane	0.03
	B	PARSOL MCX	Ethylhexyl Methoxycinnamate
KP-561P		Acrylates/Stearyl Acrylate/Dimethicone Methacrylate Copolymer	2.68
CERAPHYL 847		Octyldodecyl Stearoyl Stearate	6.92
COSMOL 43 SV		Polyglyceryl-2 Triisostearate	1.80
SENSIVA SC 50		Ethylhexylglycerin	0.20
DERMOSOFT OCTIOL		Caprylyl Glycol	0.30
PHENOXYETHANOL	Phenoxyethanol	0.30	

Product Grades

Grades	Average Particle Size (D50, μm)	Average Oil Absorption Degree (mL/100g)
SILNOS 130	3.0	150
SILNOS 160	6.0	150
SILNOS 190	9.0	150
SILNOS 230	3.0	80
SILNOS 260	6.0	80
SILNOS 290	9.0	80
SILNOS 350	9.0	250

Product Grades

Suffix	Treated Material	Function
-TE	Triethoxy-caprylylsilane	Silky texture, skin adhesion, water repellency, improved dispersibility
-D	Dimethicone	Silky texture, skin adhesion
-M	Methicone	Silky texture, skin adhesion