

Technical Data Sheet

Silicon Carbide Powder

Product ID:	140600PD001 - 140600PD010		
Formular:	SiC	Molecular weight:	40.1 g/mol
CAS No.:	409-21-2	EINECS No.:	206-991-8
Color:	grayish-white to yellowish-brown, green, gray-black		
Description:	Our silicon carbide is available in alpha and beta phases, with nano- and micron-sized powders. Particle size can be customized to meet customer requirements. It features high hardness, excellent thermal conductivity, and outstanding stability under high temperatures and corrosive environments.		
Application:	Semiconductors, precision polishing, advanced ceramics, thermal management, 3D printing, abrasives, other high-temperature and wear-resistant industrial, etc.		

**Product
Image:**



1. Sizes

Product ID	Phase	Formular	Average Size
140600PD001	α- SiC	SiC (99%)	500 nm
140600PD002		SiC (99.5%)	10~30µm
140600PD003		SiC (99.9%)	100nm, 500nm, <1µm, <3µm
140600PD004		SiC (99.99%)	<3µm
140600PD005		SiC (99.999%)	40~60µm, 60~80µm, 80~100µm, 100~150µm, 150~200µm
140600PD006		SiC (99.9999%)	40~60µm, 60~80µm, 80~100µm, 100~150µm, 150~200µm
140600PD007	β- SiC	SiC (99%)	500nm, <1µm, <5µm
140600PD008		SiC (99.9%)	100nm, 500nm, <1µm, <5µm, <7µm
140600PD009		SiC (99.995%)	<5µm, <7µm, 7~15µm, 15~25µm, 25~35µm, 30~45µm, 45~55µm
140600PD010		SiC (99.9995%)	<5µm, <7µm, 7~15µm, 15~25µm, 25~35µm, 30~45µm, 45~55µm

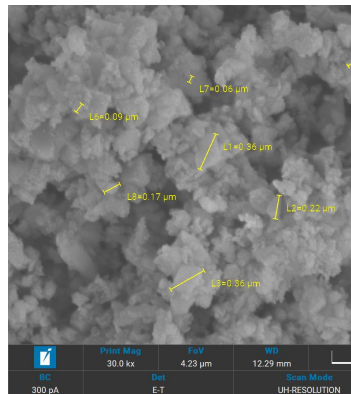
140600PDADZ	α - SiC	Customized	Customized
140600PDBDZ	β - SiC	Customized	Customized

2. Chemical compositions

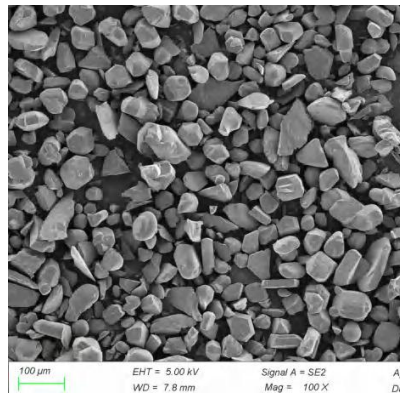
Element Typical Value Purity	Metal impurities (ppm)			
	O	Fe	Al	Ca
99%	$\leq 1.5\%$	≤ 500	≤ 300	≤ 300
99.5%	/	≤ 300	≤ 200	≤ 200
99.9%	$\leq 0.03\%$	≤ 150	≤ 100	≤ 100
99.99%	/	≤ 10	≤ 15	≤ 10
99.999%	/	≤ 1.0	≤ 1.5	≤ 2.0
99.9999%	/	≤ 0.05	≤ 0.05	≤ 0.15

Note: The purity values shown are calculated by subtracting the sum of selected measured elemental impurities from 100%. These values do not represent the result of a full elemental analysis.

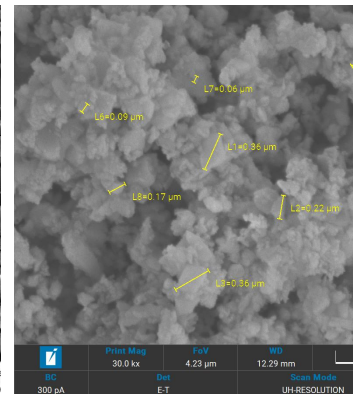
3. SEM Images



α - SiC(99.9%) 100nm



α - SiC (99.999%) 60-80 μ m



β - SiC(99.9%) 100nm

4. Packaging

Bottled/Bag.

Double vacuum packaging.

Custom packaging is available.

5. Period of Validity

It is recommended to use this product within 12 months (stored under proper conditions). If it is overdue, the product quality status should be re-evaluated.

5. Handling and Storage

When using, wear protective equipment (e.g., mask, goggles, and gloves) and operate in a well-ventilated area to avoid inhalation of dust or direct skin contact.

Store in a dry, sealed container away from moisture and strong oxidizing agents.

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