SiC Powder LIST

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OS TECH

material_info@ostech.co.jp

http://www.ostech.co.jp

〒590-0023 大阪府堺市堺区南三国ケ丘町 5-2-27

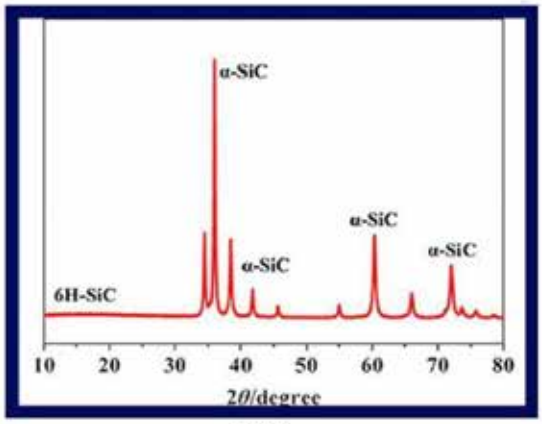
TEL : 072-221-2778 FAX : 072-221-2779

Semi-Insulating Semiconductor High-purity Silicon Carbide

EAG LABORATORIES

Element	Concentration [ppm wt]	Element	Concentration [ppm wt]
Li	< 0.01	Pd	< 0.05
Be	< 0.01	Ag	< 0.05
B	0.01	Cd	< 0.05
C	Matrix	In	< 0.05
N	-	Sn	< 0.05
O	-	Sb	< 0.05
F	-	Te	< 0.1
Na	< 0.05	I	< 0.05
Mg	< 0.05	Cs	< 0.05
Al	< 0.01	Ba	< 0.05
Si	0.29	La	< 0.05
P	< 0.01	Ce	< 0.05
S	< 0.1	Pr	< 0.05
Cl	0.1	Nd	< 0.05
K	< 0.05	Sm	< 0.05
Ca	< 0.05	Eu	< 0.05
Sc	< 0.05	Gd	< 0.05
Ti	< 0.01	Tb	< 0.05
V	< 0.01	Dy	< 0.05
Cr	< 0.1	Ho	< 0.05
Mn	< 0.01	Er	< 0.05
Fe	< 0.01	Tm	< 0.05
Co	< 0.05	Yb	< 0.05
Ni	< 0.01	Lu	< 0.05
Cu	< 0.05	Hf	< 0.05
Zn	< 0.1	Ta	-
Ga	< 0.1	W	< 0.05
Ge	< 0.1	Re	< 0.05
As	< 0.05	Os	< 0.05
Se	< 0.1	Ir	< 0.05
Br	< 0.05	Pt	< 0.05
Rb	< 0.05	Au	< 0.1
Sr	< 0.05	Hg	< 0.1
Y	< 0.01	Tl	< 0.01
Zr	< 0.01	Pb	< 0.01
Nb	< 0.05	Bi	< 0.01
Mo	< 0.05	Th	< 0.01
Ru	< 0.05	U	< 0.01
Rh	< 0.05		

Note 1: Purity ≥ 6N (based on observed detection limits)



XRD

SIMS N Bulk Analysis Results
EAG Job: H08KJ707

Concentration (atoms/cm3)

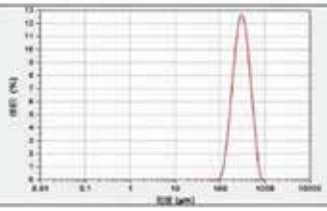
N data

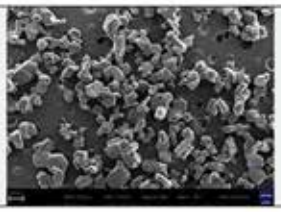
	Sample ID.	Analysis1	Analysis2	Ave
1#	sample	4.91E+16	4.88E+16	4.90E+16
	Detection Limits		1.00E+16	

*This result is for reference only and does not serve as a social proof

GDMS SIMS

Product model:
JCSI300S





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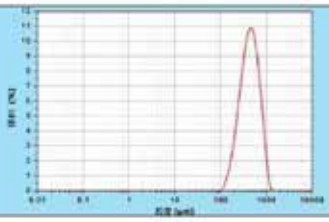
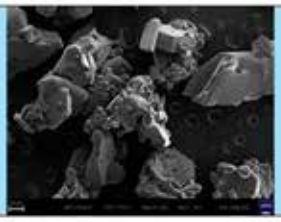
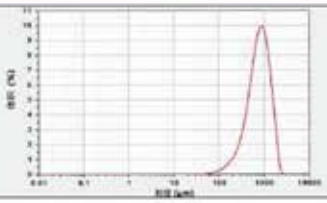
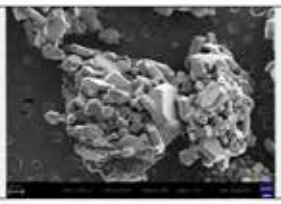




Product model:
JCSI800SZJ





OS TECH

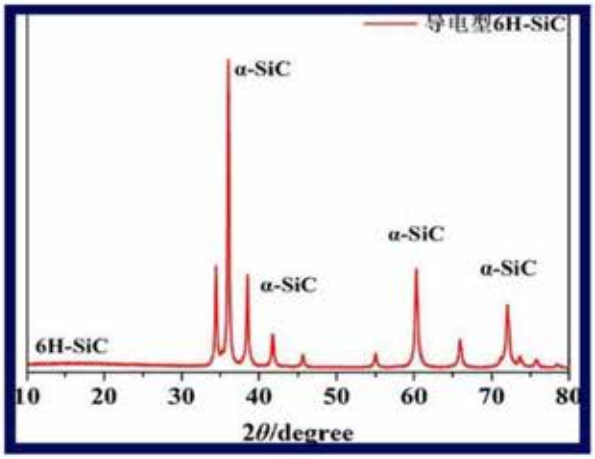
material_info@ostech.co.jp http://www.ostech.co.jp

〒590-0023 大阪府堺市堺区南三国ケ丘町 5-2-27
TEL : 072-221-2778 FAX : 072-221-2779

Conductive Semiconductor High-purity Silicon Carbide

元素	含量	元素	含量
Li	< 0.005	Ag	< 0.05
Be	< 0.005	Cd	< 0.1
B	0.07	In	辅助电极
C	主成分	Sn	< 0.5
F	< 1	Sb	< 0.05
Na	< 0.01	Te	< 0.05
Mg	< 0.05	I	< 5
Al	< 0.01	Cs	< 0.05
Si	主成分	Ba	< 0.01
P	< 0.01	La	< 0.5
S	0.07	Ce	< 0.05
Cl	0.11	Pr	< 0.05
K	< 0.1	Nd	< 0.01
Ca	< 0.1	Sm	< 0.01
Sc	< 0.005	Eu	< 0.05
Ti	0.006	Gd	< 0.01
V	< 0.005	Tb	< 0.01
Cr	< 0.1	Dy	< 0.01
Mn	< 0.005	Ho	< 0.01
Fe	0.02	Er	< 0.01
Co	< 0.005	Tm	< 0.01
Ni	< 0.01	Yb	< 0.01
Cu	< 0.005	Lu	< 0.01
Zn	< 0.05	Hf	< 0.01
Ga	< 0.01	Ta	< 10
Ge	< 0.05	W	< 0.05
As	< 0.01	Re	< 0.005
Se	< 0.1	Os	< 0.005
Br	< 0.1	Ir	< 0.005
Rb	< 0.005	Pt	< 0.01
Sr	< 0.005	Au	< 0.5
Y	< 0.005	Hg	< 0.1
Zr	< 0.005	Tl	< 0.01
Nb	< 0.005	Pb	< 0.05
Mo	< 0.05	Bi	< 0.01
Ru	< 0.005	Th	< 0.005
Rh	< 0.005	U	< 0.005
Pd	< 0.05		

GDMS



XRD

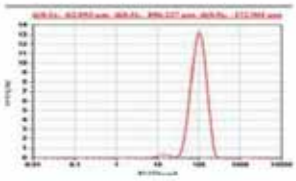
Analysis of N in SiC

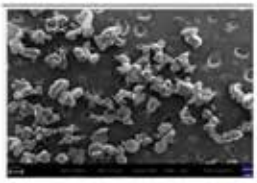
SiC Atom Density: 9.68e22 at/cm3

Sample No.	N concentration (at/cm3)	ppm
1	2.01E+17	2.1
2	2.49E+18	25.8
3	5.35E+18	55.2
4	6.67E+18	68.9

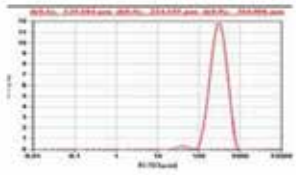
SIMS

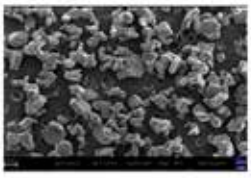
Product model:
JCEC100N



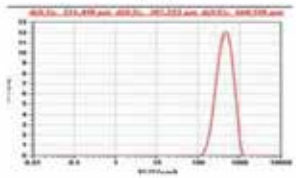


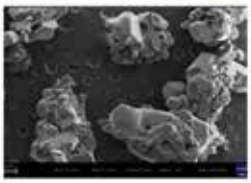
Product model:
JCEC300N





Product model:
JCEC500N





Product model:
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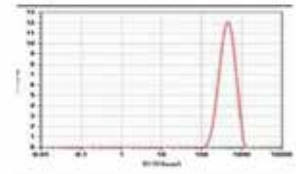

Product model:
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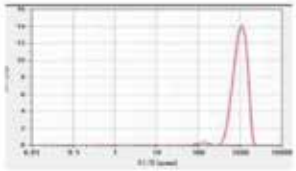
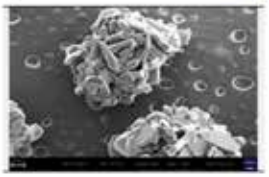




OSTECH

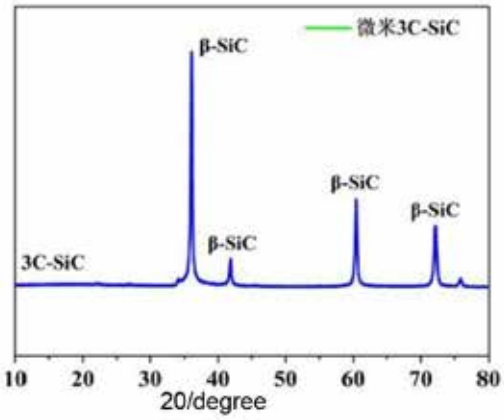
material_info@ostech.co.jp http://www.ostech.co.jp

〒590-0023 大阪府堺市堺区南三国ケ丘町 5-2-27

TEL : 072-221-2778 FAX : 072-221-2779

3C Crystalline large particle Semiconductor High-purity Silicon Carbide

Semiconductor grade 3C produced by our company.Crystalline large particle silicon carbide polycrystalline powder is mainly.In view of the special needs of different growth processes of the third-generation semiconductor silicon carbide single crystal, grain.The diameter can reach hundreds of microns, which is the first of its kind in China.Technology, product purity reaches 6N.



XRD

PAT博思察分析

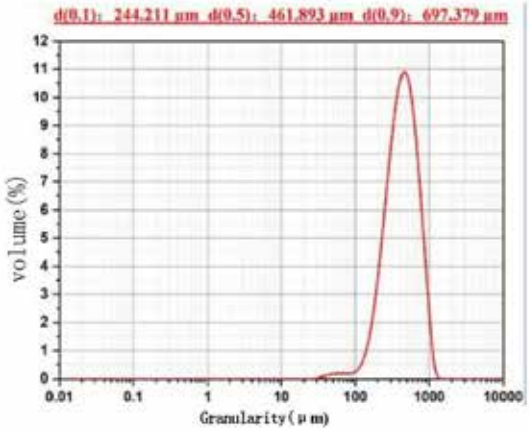
NHQ ppm wt

元素	含量	元素	含量
Li	< 0.005	Ag	< 0.05
Be	< 0.005	Cd	< 0.1
B	0.11	In	辅助电极
C	主成分	Sn	< 0.5
F	< 1	Sb	< 0.05
Na	0.06	Te	< 0.05
Mg	0.07	I	< 5
Al	0.08	Cs	< 0.05
Si	主成分	Ba	< 0.01
P	0.12	La	< 0.5
S	0.26	Ce	< 0.05
Cl	0.14	Pr	< 0.05
K	< 0.1	Nd	< 0.01
Ca	0.22	Sm	< 0.01
Sc	< 0.005	Eu	< 0.05
Ti	0.006	Gd	< 0.01
V	< 0.005	Tb	< 0.01
Cr	< 0.1	Dy	< 0.01
Mn	< 0.005	Ho	< 0.01
Fe	0.02	Er	< 0.01
Co	< 0.005	Tm	< 0.01
Ni	< 0.01	Yb	< 0.01
Cu	< 0.005	Lu	< 0.01
Zn	< 0.05	Hf	< 0.01
Ga	< 0.01	Ta	< 10
Ge	< 0.05	W	< 0.05
As	< 0.01	Re	< 0.005
Se	< 0.1	Os	< 0.005
Br	< 0.1	Ir	< 0.005
Rb	< 0.005	Pt	< 0.01
Sr	< 0.005	Au	< 0.5
Y	< 0.005	Hg	< 0.1
Zr	< 0.005	Tl	< 0.01
Nb	< 0.005	Pb	< 0.05
Mo	< 0.05	Bi	< 0.01
Ru	< 0.005	Th	< 0.005
Rh	< 0.005	U	< 0.005
Pd	< 0.05		

GDMS

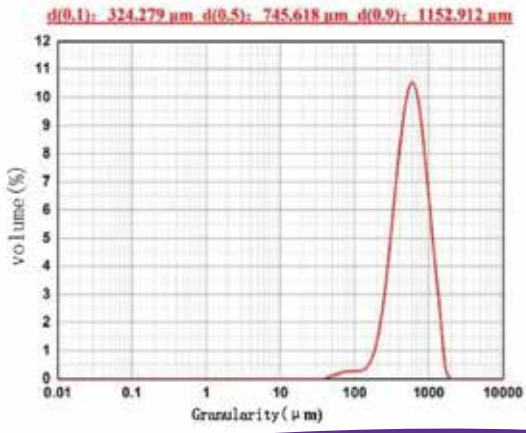
Product number:

JCS1500S-β



Product number:

JCS1800S-β



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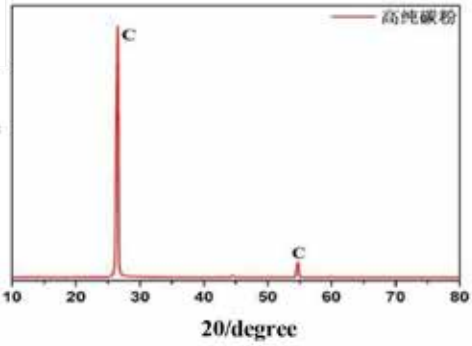
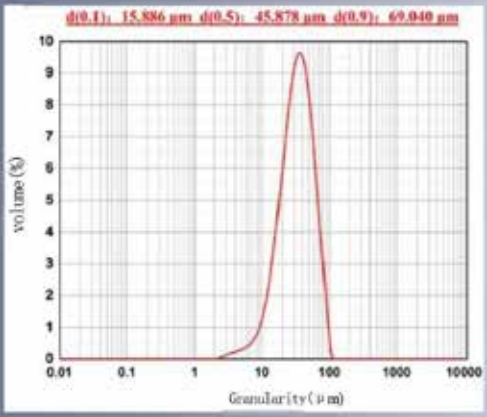
〒590-0023 大阪府堺市堺区南三国ケ丘町 5-2-27
TEL : 072-221-2778 FAX : 072-221-2779

High-purity toner

High-purity graphite prepared using precursor pyrolysis-graphitization process.The powder has high purity (6N) because the preparation process is halogen- and nitrogen-free.Influence of elements, reduce the content of non-metallic elements in graphite powder, reduceAdverse effects on subsequent products; at the same time, the particle size of high-purity graphite powder.It can be adjusted, and the particle size can be adjusted from millimeters to microns.Suitable for different customers' customized needs. This product meets the requirements of silicon carbide singleCrystal, diamond crystal growth and preparation of high-purity carbides,It is also widely used in semiconductor and other fields.



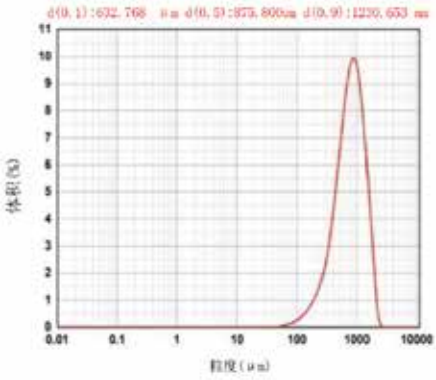
Product type number JCCPN50N5



GDMS 数据

元素	含量	元素	含量
Li	< 0.05	Ag	< 0.05
Be	< 0.05	Cd	< 0.1
B	< 0.01	In	辅助电极
C	主成分	Sn	< 1
F	< 0.5	Sb	< 0.05
Na	< 0.05	Te	< 0.05
Mg	< 0.1	I	< 100
Al	0.06	Cs	< 0.05
Si	0.76	Ba	< 0.1
P	0.11	La	< 50
S	0.26	Ce	< 0.5
Cl	3.1	Pr	< 0.1
K	< 0.1	Nd	< 0.05
Ca	< 0.5	Sm	< 0.05
Sc	< 0.05	Eu	< 0.05
Ti	< 0.05	Gd	< 0.05
V	< 0.01	Tb	< 0.05
Cr	< 0.1	Dy	< 0.05
Mn	< 0.05	Ho	< 0.05
Fe	< 0.05	Er	< 0.05
Co	< 0.05	Tm	< 0.05
Ni	< 0.05	Yb	< 0.05
Cu	< 0.05	Lu	< 0.05
Zn	< 0.05	Hf	< 0.05
Ga	< 0.05	Ta	< 5
Ge	< 0.1	W	< 0.05
As	< 0.1	Re	< 0.05
Se	< 0.1	Os	< 0.05
Br	< 0.1	Ir	< 0.05
Rb	< 0.1	Pt	< 0.1
Sr	< 0.1	Au	< 0.1
Y	< 0.05	Hg	< 0.5
Zr	< 0.05	Tl	< 0.05
Nb	< 0.1	Pb	< 0.5
Mo	< 0.05	Bi	< 0.05
Ru	< 0.05	Th	< 0.01
Rh	< 0.05	U	< 0.01
Pd	< 0.05		

Product type number:CCPN800N5



GDMS 数据

元素	含量	元素	含量
Li	< 0.05	Ag	< 0.05
Be	< 0.05	Cd	< 0.1
B	0.02	In	辅助电极
C	主成分	Sn	< 1
F	< 0.5	Sb	< 0.05
Na	< 0.05	Te	< 0.05
Mg	< 0.1	I	< 100
Al	0.02	Cs	< 0.05
Si	0.64	Ba	< 0.1
P	< 0.1	La	< 50
S	0.74	Ce	< 0.5
Cl	1.1	Pr	< 0.1
K	< 0.1	Nd	< 0.05
Ca	< 0.5	Sm	< 0.05
Sc	< 0.05	Eu	< 0.05
Ti	< 0.05	Gd	< 0.05
V	< 0.01	Tb	< 0.05
Cr	< 0.1	Dy	< 0.05
Mn	< 0.05	Ho	< 0.05
Fe	< 0.05	Er	< 0.05
Co	< 0.05	Tm	< 0.05
Ni	< 0.05	Yb	< 0.05
Cu	< 0.05	Lu	< 0.05
Zn	< 0.05	Hf	< 0.05
Ga	< 0.05	Ta	< 5
Ge	< 0.1	W	< 0.05
As	< 0.1	Re	< 0.05
Se	< 0.1	Os	< 0.05
Br	< 0.1	Ir	< 0.05
Rb	< 0.1	Pt	< 0.1
Sr	< 0.1	Au	< 0.1
Y	< 0.05	Hg	< 0.5
Zr	< 0.05	Tl	< 0.05
Nb	< 0.1	Pb	< 0.5
Mo	< 0.05	Bi	< 0.05
Ru	< 0.05	Th	< 0.01
Rh	< 0.05	U	< 0.01
Pd	< 0.05		

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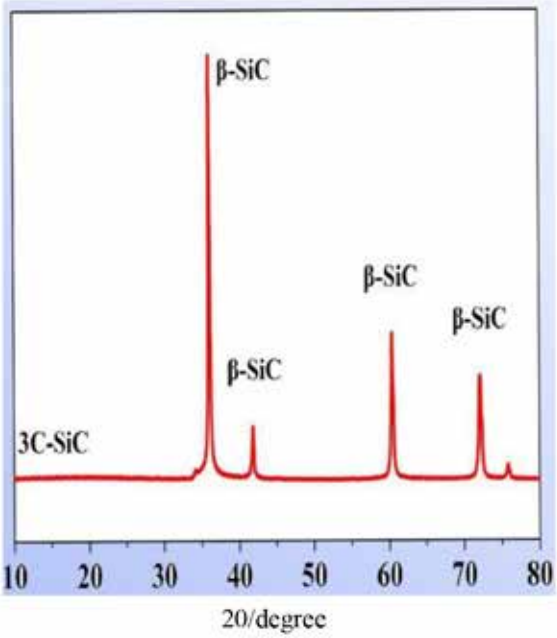
High-purity Silicon Carbide ceramic powder (3C crystal form)

Ceramic Powder Report



GDMS 数据

元素	含量	元素	含量
Li	< 0.05	Ag	< 0.05
Be	< 0.05	Cd	< 0.1
B	0.07	In	辅助电极
C	主成分	Sn	< 1
F	< 0.5	Sb	< 0.05
Na	5.15	Te	< 0.05
Mg	3.11	I	< 100
Al	5.1	Cs	< 0.05
Si	主成分	Ba	< 0.1
P	0.15	La	< 50
S	0.63	Ce	< 0.5
Cl	0.3	Pr	< 0.1
K	< 0.1	Nd	< 0.05
Ca	2.5	Sm	< 0.05
Sc	< 0.05	Eu	< 0.05
Ti	0.54	Gd	< 0.05
V	0.09	Tb	< 0.05
Cr	< 0.1	Dy	< 0.05
Mn	< 0.05	Ho	< 0.05
Fe	8.05	Er	< 0.05
Co	< 0.05	Tm	< 0.05
Ni	< 0.05	Yb	< 0.05
Cu	< 0.05	Lu	< 0.05
Zn	< 0.05	Hf	< 0.05
Ga	< 0.05	Ta	< 5
Ge	< 0.1	W	< 0.05
As	< 0.1	Re	< 0.05
Se	< 0.1	Os	< 0.05
Br	< 0.1	Ir	< 0.05
Rb	< 0.1	Pt	< 0.1
Sr	< 0.1	Au	< 0.1
Y	< 0.05	Hg	< 0.5
Zr	2.52	Tl	< 0.05
Nb	< 0.1	Pb	< 0.5
Mo	< 0.0	Bi	< 0.05
Ru	< 0.05	Th	< 0.01
Rh	< 0.05	U	< 0.01
Pd	< 0.05		

4N

GDMS 数据

元素	含量	元素	含量
Li	< 0.05	Ag	< 0.05
Be	< 0.05	Cd	< 0.1
B	0.21	In	辅助电极
C	主	Sn	< 1
F	0.1	Sb	< 0.05
Na	0.15	Te	< 0.05
Mg	0.1	I	< 100
Al	0.35	Cs	< 0.05
Si	主	Ba	< 0.1
P	< 0.1	La	< 50
S	0.3	Ce	< 0.5
Cl	0.4	Pr	< 0.1
K	< 0.1	Nd	< 0.05
Ca	0.3	Sm	< 0.05
Sc	< 0.05	Eu	< 0.05
Ti	0.75	Gd	< 0.05
V	0.63	Tb	< 0.05
Cr	< 0.1	Dy	< 0.05
Mn	< 0.05	Ho	< 0.05
Fe	1	Er	< 0.05
Co	< 0.05	Tm	< 0.05
Ni	0.1	Yb	< 0.05
Cu	< 0.05	Lu	< 0.05
Zn	< 0.05	Hf	< 0.05
Ga	< 0.05	Ta	< 5
Ge	< 0.1	W	< 0.05
As	< 0.1	Re	< 0.05
Se	< 0.1	Os	< 0.05
Br	< 0.1	Ir	< 0.05
Rb	< 0.1	Pt	< 0.1
Sr	< 0.1	Au	< 0.1
Y	< 0.05	Hg	< 0.5
Zr	< 0.05	Tl	< 0.05
Nb	< 0.1	Pb	< 0.5
Mo	< 0.0	Bi	< 0.05
Ru	< 0.05	Th	< 0.01
Rh	< 0.05	U	< 0.01
Pd	< 0.05		

5N

GDMS 数据

元素	含量	元素	含量
Li	< 0.005	Ag	< 0.05
Be	< 0.005	Cd	< 0.1
B	0.03	In	辅助电极
C	主成分	Sn	< 0.5
F	< 0.5	Sb	< 0.05
Na	0.05	Te	< 0.05
Mg	< 0.05	I	< 5
Al	0.4	Cs	< 0.05
Si	主成分	Ba	< 0.01
P	< 0.01	La	< 0.5
S	0.11	Ce	< 0.05
Cl	0.33	Pr	< 0.05
K	< 0.1	Nd	< 0.01
Ca	< 0.1	Sm	< 0.01
Sc	< 0.005	Eu	< 0.05
Ti	< 0.005	Gd	< 0.01
V	< 0.005	Tb	< 0.01
Cr	< 0.1	Dy	< 0.01
Mn	< 0.005	Ho	< 0.01
Fe	0.04	Er	< 0.01
Co	< 0.005	Tm	< 0.01
Ni	< 0.01	Yb	< 0.01
Cu	0.17	Lu	< 0.01
Zn	< 0.05	Hf	< 0.01
Ga	< 0.01	Ta	< 10
Ge	< 0.05	W	< 0.05
As	< 0.01	Re	< 0.005
Se	< 0.1	Os	< 0.005
Br	< 0.1	Ir	< 0.005
Rb	< 0.005	Pt	< 0.01
Sr	< 0.005	Au	< 0.5
Y	< 0.005	Hg	< 0.1
Zr	< 0.005	Tl	< 0.01
Nb	< 0.005	Pb	< 0.05
Mo	< 0.01	Bi	< 0.01
Ru	< 0.005	Th	< 0.005
Rh	< 0.005	U	< 0.005
Pd	< 0.05		

6N

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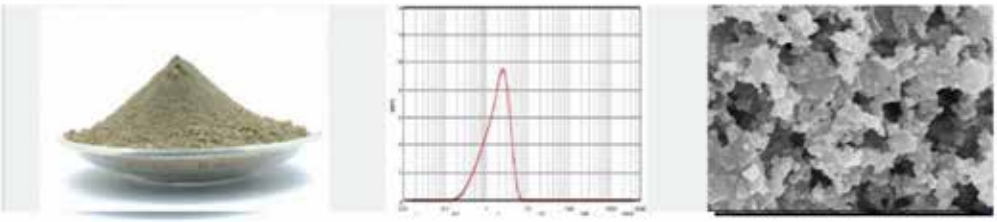
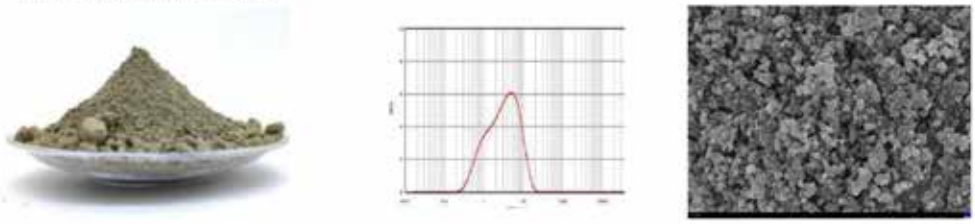
High-purity Silicon Carbide ceramic powder (3C crystal form)

Ceramic powder products

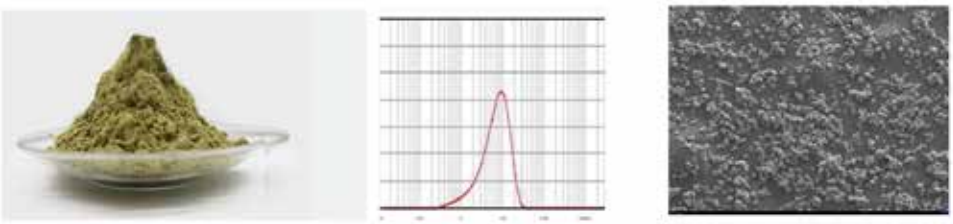
Product model: JCCP02U



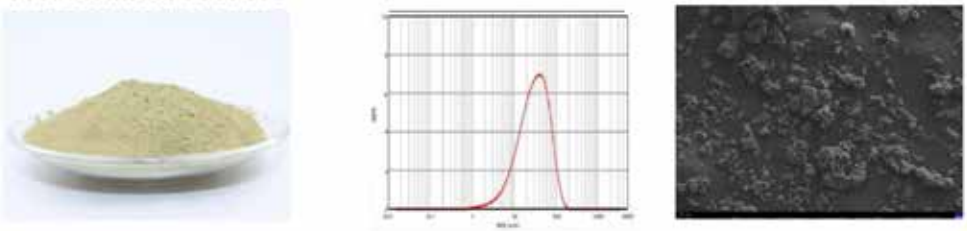
Product model: JCCP5U



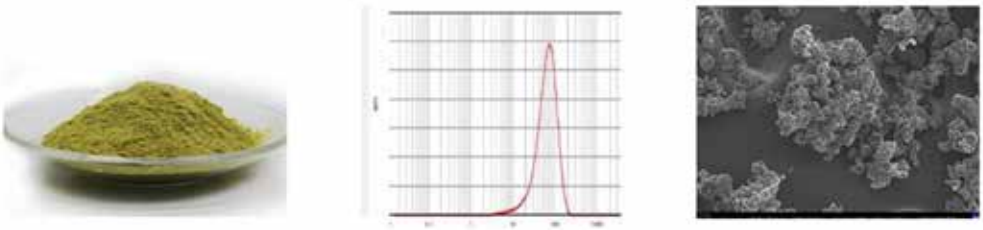
Product model :JCCP10U



Product model: JCCP30U



Product model: JCCP80U



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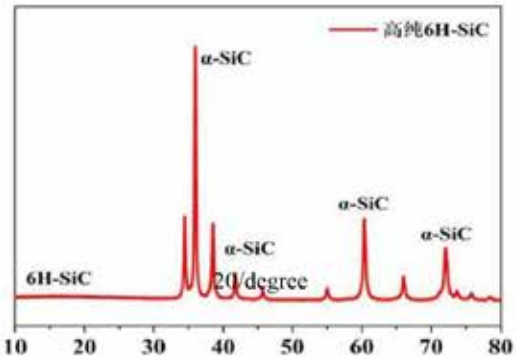
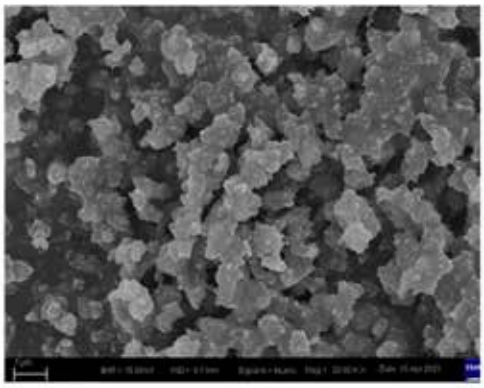
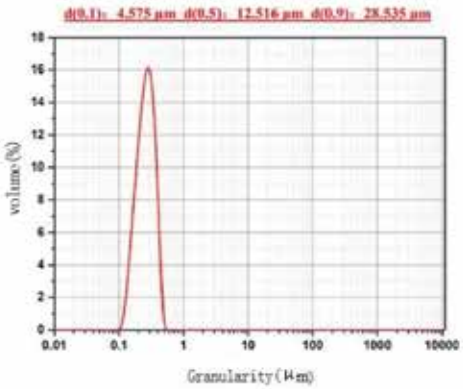
Thermal management material Thermal conductive filler (Electronic grade SiC)

High purity silicon carbide powder has excellent high thermal conductivity (1 65W/M.K), small thermal expansion coefficient, corrosion resistance, chemical stability and thermal stability, high strength, high hardness and other characteristics, which make it have broad prospects in the preparation of ultra-high thermal conductivity composite materials. Currently, there is no high-purity (higher than6N) silicon carbide powder manufacturers, and because high-purity silicon carbide powder higher than 6N is mainly used in the semiconductor field, cross-industry technical needs have not been actually solved.The company adopts the world's first precursor derivation method and self-propagating sintering method. The high-purity silicon carbide powder produced has a huge price advantage, which greatly promotes the application of high-purity silicon carbide powder in the field of thermal management materials and belongs to the industry. It fills the gap in the domestic market, has obvious technical and price advantages, and is a pioneering product.

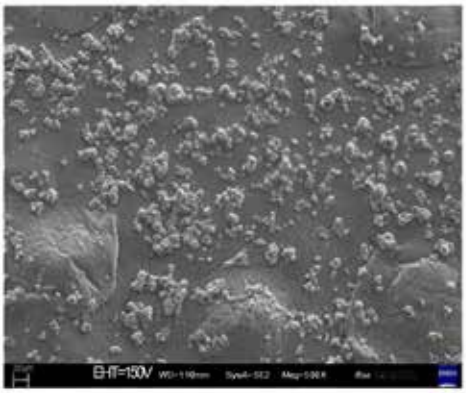


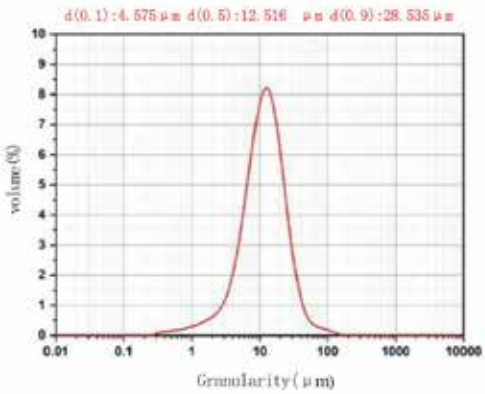
Product model：JCTMM02U





Product model：JCTMM10U





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