

Grain Size Distribution

Specific surface area (BET)			d10	d50	d90
504	SM 04	3 – 5 m ² /g	> 0.1 μm	0.4 – 2 μm	< 9 μm
505	SM 05	4 – 6 m ² /g	> 0.1 μm	0.5 – 2 μm	< 6.5 μm
507	SM 07	6 – 8 m ² /g	> 0.1 μm	0.3 – 0.6 μm	< 2 μm
509	SM 09	8 – 10 m ² /g	> 0.1 μm	0.3 – 0.6 μm	< 1.9 μm
510	SM 10	9 – 11 m ² /g	> 0.1 μm	0.3 – 0.9 μm	< 2.5 μm
511	SM 11	10 – 12 m ² /g	> 0.1 μm	0.5 – 0.7 μm	< 1.6 μm
513	SM 13	12 – 14 m ² /g	> 0.1 μm	0.3 – 0.65 μm	< 1.9 μm
515	SM 15	14 – 16 m ² /g	> 0.1 μm	0.3 – 0.5 μm	< 1.3 μm
525	SM 25	24 – 26 m ² /g	> 0.1 μm	0.1 – 0.3 μm	< 3.5 μm
530	SM 30	29 – 31 m ² /g	> 0.1 μm	0.1 – 0.3 μm	< 1 μm

Other grain sizes on request

Chemical Composition

B ₄ C	base
SiO ₂	< 1.2%
Al ₂ O ₃	< 0.1%
Fe ₂ O ₃	< 0.4%
CaO	< 0.05%
TiO ₂	< 0.1%

These properties are typical but do not constitute specifications

Physical Properties

Theoretical Density	2.51 g/cm ³
Melting Point	2350 °C
Hardness	30 – 40 HV ₁₀
Thermal Conductivity	30 W/(m·K)
Color	dark grey

1) at 20kN/cm²

Applications

Neutron Absorber Material, Ballistic, Nozzels, Cutting Tools, Wear Protection

