

Boron Carbide Ultrafine Powder User Manual

Batch Number :
24.05.2024

Boron Carbide Grade : W5,W3.5,W0.2

Chemical Formula	B ₄ C
Chemical Name	Boron Carbide
HS Number	28499010
CAS Number	12069-32-8
Grades Available	Product Designation (Customization supported) B ₄ C W5 B ₄ C W3.5 B ₄ C W0.2

Chemical Characteristics

(Massfractionin%[cg/g];ppm[μg/g])

Grade	W5	W3.5	W0.2
Total : B	77.54%	77.64%	75.61%
Free : B	0.49%	0.88%	3.52%
B ₂ O ₃	0.27%	0.50%	1.21%
Total : C	20.34%	20.11%	20.25%
Free : C	1.18%	1.04%	1.45%
B ₄ C	96.21%	95.83%	90.89%
Fe	0.12%	0.07%	0.13%
T:B+T:C	/	/	/

Physical Characteristics

Specific Surface Area	6.0 - 9.0 m ² /g	15.0 - 21.0 m ² /g	22.0 - 27.0 m ² /g
Green Density	1.3 - 1.5 g/cm ³	1.3 - 1.5 g/cm ³	1.3 - 1.5 g/cm ³

Boron Carbide Particle Size Distribution

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Grade	D10	D50	D90	Particle Size Distribution Table
W5	2.024μm	4.164μm	7.153μm	
W3.5	0.810μm	3.336μm	5.901μm	
W0.2	0.109μm	0.246μm	0.657μm	

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Packaging

25 kg paper drums with a polyethylene inlet (60 liters), 8 drums per pallet, CP1 size (1000x1200 mm) = 200 kg per packaging unit. Other packaging or quantities can be customized upon request.

Lot Size

5D-Materials boron carbide powders are available in homogeneous lots up to 10 tons.

Storage and Handling

Storage and handling are subject to the rules and regulations in the country of use. Store in a closed container.

Hazards identification in Advertising (REGULATION (EC) No 1272/2008)

Reproductive toxicity Category 1B - (H360)

Signal word
Danger



Hazard statements H360FD - May damage fertility.
May damage the unborn child Contains diboron

Documentation

An inspection document in accordance with EN 10204 is supplied with every shipment.

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