

POWDERS FOR ADVANCED CERAMICS

Number Issue

PD-4021 6-08.08.2025

BORON CARBIDE GRADE HD 07, 15, 20

Chemical Formula B₄C

Chemical Name Boron Carbide

HS Number 28499010

Grades Available Product Designation

B₄C Grade HD 07 B₄C Grade HD 15 B₄C Grade HD 20

Chemical Characteristics

(Mass fraction in % [cg/g]; ppm [µg/g])

	Grade HD 07	Grade HD 15	Grade HD 20			
B:C Ratio C	3.8 - 4.0 min. 21.8 %	3.6 - 3.9 min. 21.8 %	3.7 - 3.9 min. 21.8 %			
N	max. 0.7 %	max. 0.7 %	max. 0.7 %			
O Fe	max. 1.2 % max. 0.1 %	max. 1.8 % max. 0.1 %	max. 2.6 % max. 0.1 %			
Si Al	max. 0.15 %	max. 0.15 % max. 0.05 %	max. 0.15 % max. 0.05 %			
Other ¹⁾	max. 0.05 % max. 0.1 %	max. 0.05 % max. 0.1 %	max. 0.05 % max. 0.1 %			
Physical Characteristics						

Specific Surface Area ²⁾	6.0	-	9.0	m²/g	15.0 - 2	21.0	m²/g	22.0 -	27.0	m²/g
Green Density ³⁾	1.3	-	1.5	g/cm ³	1.3 -	1.5	g/cm ³	1.3 -	1.5	g/cm ³
Particle Size Distribution ⁴⁾										
D 90 %	3.0	-	5.0	μm	1.2 -	2.5	μm	0.9-	1.5	μm
D 50 %	1.0	-	2.0	μm	0.6 -	0.9	μm	0.3 -	0.6	μm
D 10 %	0.2	-	0.4	μm	0.1 -	0.3	μm	0.1 -	0.3	μm

¹⁾ Sum total Ca, Cr, Mg, Mn, Ni, Ti, W, 2) TriStar 3-point by BET per ASTM D 3663, 3) 10³ kg/cm², 4) MASTERSIZER by Laser Light Diffraction per ASTM B 822, deglomeration with high energy ultrasonic before analysis



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Packaging 25 kg steel drums with polyethylene inlet.(60 Liter) 8 drums

on one pallet CP1 (1000x1200 mm) = 1 Packaging-unit of 200 kg.

Other packaging/quantity on request.

Lot Size

Höganäs boron carbide powders are available in homogeneous

lots up to 5 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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https://www.hoganas.com/en/contact/

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