Höganäs

POWDERS FOR SPECIAL APPLICATION

Number PD-4003
Issue 4-31.03.2010

CRYSTALLINE BORON

GRADE K1, GRADE K2, GRADE KT1, GRADE P1

Chemical Formula	B
Chemical Name	Crystalline Boron
Description of Product	Rhombohedral crystallographic phase
HS Number	2804501
Grades Available	**Product Designation** Crystalline Boron Grade K1 Crystalline Boron Grade K2 Crystalline Boron Grade KT1 Crystalline Boron Grade P1[e)]

Chemical Characteristics

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

		Grade K1	Grade K2	Grade KT1	Grade P1
B	min.	99.4 %	99.4 %	98.0 %	98.0 %
C	max.	0.3 %	0.3 %	0.75 %	0.75 %
N	max.	0.05 %	0.05 %	0.1 %	0.1 %
O	max.	0.1 %	0.1 %	0.2 %	0.5 %
Al	max.	0.1 %	0.1 %	0.1 %	0.1 %
Fe	max.	0.1 %	0.1 %	0.2 %	0.25 %
Mn	max.	0.1 %	0.1 %	0.1 %	0.1 %
Si	max.	0.2 %	0.2 %	0.2 %	0.2 %

Physical Characteristics

Nominal Particle Size[x)]	1 - 20 mm	3 - 8 mm	1 - 20 mm	
Particle Size Distribution[1)] < 38 µm			min. 95%	
Specific Surface Area[2)]			0.6 - 2.0	m²/g
Apparent Density[3)]			8 - 12	g/inch³

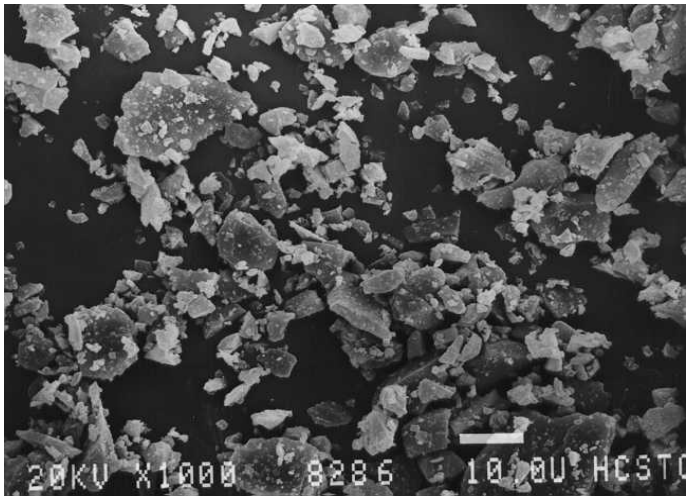
1) ALPINE Air Jet Screening, 2) Tri Star 3000 3-point, by BET per ASTM D 3663,
3) SCOTT-VOLUMETER per ASTM B 329, e) This product is under export control, x) Material is screened to meet the nominal particle size range. Due to their irregular shape, particles with smaller or larger diameter are embodied. This natural material characteristic is excluded as a subject of rejection.

Höganäs

Number	PD-4003
Issue	4-31.03.2010

Photomicrograph
scale see photograph,
Crystalline Boron Grade K1

SEM Photomicrograph[4)]
scale see photograph,
Crystalline Boron Grade P1



Packaging

Standard for large quantities:
50 kg steel drums (60 l) with polyethylene inlet.
8 drums on one pallet CP1
(1000x1200 mm) = 1 Packaging unit of 400 kg.
Standard for small quantities:
2.5 kg polyethylene bottles (2.5 l).
6 bottles in one carton
(300 x 400 mm) = 1 packaging unit of 15 kg.
Other packaging / quantity on request.

Lot Size
Höganäs crystalline Boron is available in homogeneous lots up to:

Grade K1, K2, KT1	200 kg
Grade P1	500 kg

4) Secondary Electron Image (SEI).

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)
None.

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

Höganäs Germany GmbH

Im Schleeke 78-91
38642 Goslar/Germany

Säckinger Straße 51
79725 Laufenburg/Germany

Phone +49 5321 751-53753

https://www.hoganas.com/en/contact/