

## CRYSTALLINE BORON

### GRADE K1, GRADE K2, GRADE KT1, GRADE P1

|                               |   |
|-------------------------------|---|
| <b>Chemical Formula</b>       | B   |
| <b>Chemical Name</b>          | Crystalline Boron   |
| <b>Description of Product</b> | Rhombohedral crystallographic phase   |
| <b>HS Number</b>              | 2804501   |
| <b>Grades Available</b>       | <b>Product Designation</b><br>Crystalline Boron Grade K1<br>Crystalline Boron Grade K2<br>Crystalline Boron Grade KT1<br>Crystalline Boron Grade P1 <sup>e)</sup> |

#### Chemical Characteristics

(Mass fraction in % [cg/g]; ppm [ $\mu$ g/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 <sup>x)</sup>                      | 1 - 20 mm | 3 - 8 mm | 1 - 20 mm                   |
| Particle Size Distribution <sup>1)</sup><br>< 38 $\mu$ m |           |          | min. 95%                    |
| Specific Surface Area <sup>2)</sup>                      |           |          | 0.6 - 2.0 m <sup>2</sup> /g |
| Apparent Density <sup>3)</sup>                           |           |          | 8 - 12 g/inch <sup>3</sup>  |

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.

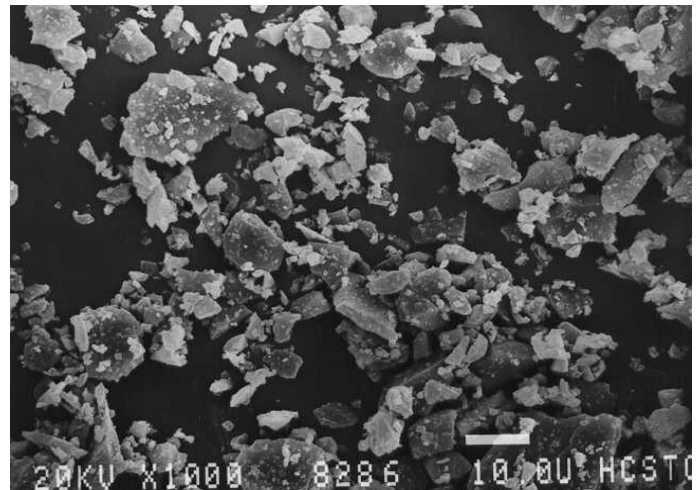
Number  
Issue

PD-4003  
4-31.03.2010

Photomicrograph  
scale see photograph,  
Crystalline Boron Grade K1



SEM Photomicrograph<sup>4)</sup>  
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.

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