

POWDERS FOR ADVANCED CERAMICS

Number Issue

PD-4073 4-14.01.2020

## BETA-SILICON CARBIDE GRADE BF 12

Chemical Formula SiC

Chemical Name Silicon Carbide

**Description of Product** Beta Phase SiC

**HS Number** 28492000

Grades Available Product Designation

SiC Grade BF 12

## **Chemical Characteristics**

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

Grade	BF	12
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С	29.5	- 30.5 %
0	max.	1.5 %
Al	max.	0.05 %
Ca	max.	0.01 %
Fe	max.	0.05 %

## **Physical Characteristics**

β-SiC	min.	95	%
α-SiC	balance	<b>;</b>	
Si <sub>free</sub>	max.	0.1	%
Specific Surface Area <sup>1)</sup>	11.0 -	13.0	m²/g

Particle Size Distribution<sup>2)</sup>

D 90 %	1.0	-	2.0	μm
D 50 %	0.4	-	0.9	μm
D 10 %	0.2	-	0.3	μm

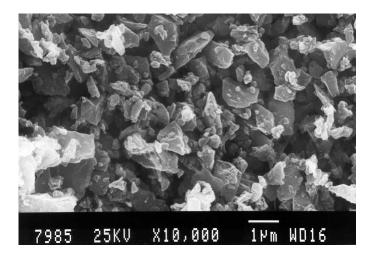
<sup>1)</sup> AREAMETER II by BET per DIN 66 132,

<sup>2)</sup> MASTERSIZER by Laser Light Diffraction per ASTM B 822, deglomeration with high energy ultrasonic before analysis.



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SEM Photomicrograph scale see photograph, Beta-Silicon Carbide Grade BF 12



**Packaging** 25 kg steel drums (30 Liter) with polyethylene inlet.

Other packaging / quantity on request.

Lot Size

Höganäs silicon carbide powders are available in homogeneous lots

up to 5 tons. Sintering Aid

As a typical sintering aid for SiC Powders we recommend our amorphous Boron

Grade I or Boron Carbide Powder Grade HS.

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

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