

## SPECIFICATIONS

- ▶ Chemical formula: SiC
- ▶ Chemical name: Silicon carbide
- ▶ Description of product: Alpha Phase SiC
- ▶ Colour: Grey

## CHEMICAL CHARACTERISTICS (TYP.)<sup>1,2</sup>

		UF 05	UF 10	UF 15	UF 25
<b>C</b>	[%]	29.50 - 30.50	29.50 - 30.50	29.00 - 30.00	28.50 - 29.50
<b>O</b>	[%]	max. 0.70	max. 1.10	max. 1.50	max. 2.50
<b>Al</b>	[%]	max. 0.03	max. 0.03	max. 0.03	max. 0.04
<b>Ca</b>	[%]	max. 0.01	max. 0.01	max. 0.01	max. 0.01
<b>Fe</b>	[%]	max. 0.05	max. 0.05	max. 0.05	max. 0.05

<sup>1</sup> Mass fraction in % [cg/g]; ppm [ $\mu$ g/g]

<sup>2</sup> Information on testing methods on request

## PHYSICAL CHARACTERISTICS (TYP.)

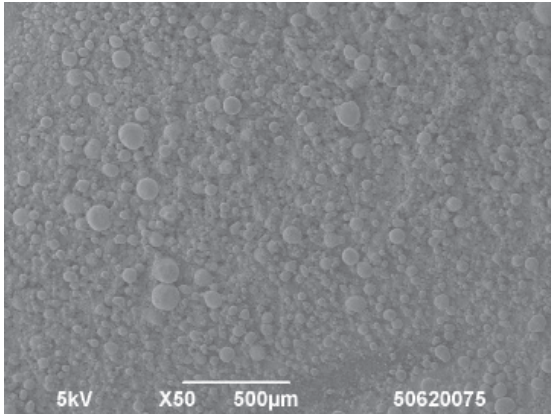
		UF 05	UF 10	UF 15	UF 25
<b><math>\alpha</math>-SiC Acheson type mainly 6 H polytype</b>					
<b>Specific surface area</b> <sup>3</sup>	[m <sup>2</sup> /g]	4 - 6	9 - 11	14 - 16	23 - 26
<b>Green density</b> <sup>4</sup>	[g/cm <sup>3</sup> ]	1.70 - 1.90	1.65 - 1.80	1.60 - 1.80	1.50 - 1.70
<b>Particle size distribution (TYP.)<sup>5</sup></b>					
<b>D90 %</b>	[ $\mu$ m]	6.0	2.2	1.5	1.0
<b>D50 %</b>	[ $\mu$ m]	2.2	0.9	0.75	0.65
<b>D10 %</b>	[ $\mu$ m]	0.6	0.45	0.4	0.35

<sup>3</sup> AREAMETER II by BET DIN 66 132

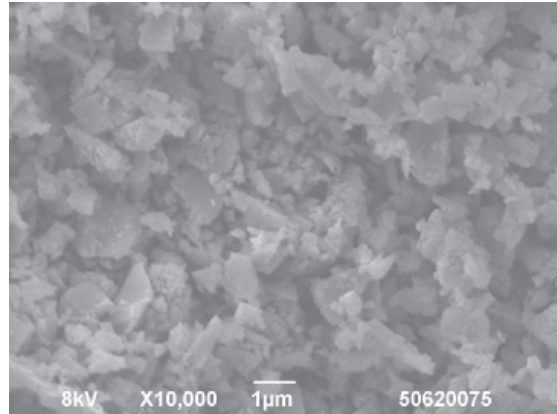
<sup>4</sup> 10<sup>3</sup> kg/cm<sup>2</sup>

<sup>5</sup> MASTERSIZER 2000 by laser light diffraction per ISO 13320, deagglomeration with high energy ultrasonic before analysis

### SEM PHOTOMICROGRAPH



Granule scale



Primary particle scale

### PACKAGING

- ▶ 25 kg steel drums with polyethylene inlet
- ▶ 12 drums on euro-pallet (800 x 1,200) = 1 packaging unit of 300 kg

### STORAGE & HANDLING

The shelf-life for unrestricted processability is dependent on the storage conditions and the specific application it is used for.

Storage and handling are subject to the rules and regulations in the country of use.

Store at room temperature in a sealed closed, original container.

### HAZARDS IDENTIFICATION IN ADVERTISING (REGULATION (EC) NO 1272/2008 ARTICLE 48)

none

### DOCUMENTATION

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

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