

# SIKA® UNIKILN FCP05 / FCP07 / 100F PRODUCT INFORMATION

## Green Silicon Carbide Powders for recrystallized (RSiC) and nitride-bonded (NSiC) technical ceramics.

Chemically treated, high purity green silicon carbide used for production of re-crystallized and nitride-bonded ceramic parts. The FCP07 with its unique slip properties used in combination with 100F provides a maximum green density and high oxidation resistance in applications such as production of kiln furniture or semiconductor components and process materials.

**Packaging** 25 kg paper bags.

### Typical Chemistry

	Free-SiO <sub>2</sub>	Free-Si	Free-C	Tot. Oxygen	S.S.A.	pH	Conductivity
<b>FCP05</b>	0.70 %	0.10 %	0.25 %	0.75 %	5.0 m <sup>2</sup> /g	4.5 - 5.5	na
<b>FCP07</b>	1.60 %	0.25 %	0.30 %	1.10 %	7.0 m <sup>2</sup> /g	4 - 5	10 μS
Analytical Procedures:	ANSI 74.15 1992			LECO	Micromeritics Gemeni V	25 gr. SiC + 50 ml D.I.H <sub>2</sub> O	5 gr. SiC + 100 ml D.I.H <sub>2</sub> O

### Typical Trace elements

	Tot. Fe ppm	Tot. Al ppm	Tot. Ni ppm	Tot. V ppm	Tot. Na ppm	Tot. Cr ppm	Tot. Ca ppm	Tot. Ti ppm	Tot. Mg ppm	Tot. K ppm
<b>FCP05</b>	500	150	100	200	< 100	25	30	100	< 100	60
<b>FCP07</b>	600	250	140	250	< 100	30	50	150	< 100	50
Analytical Procedures:	X-RAY Fluorescence									

### Typical Analysis

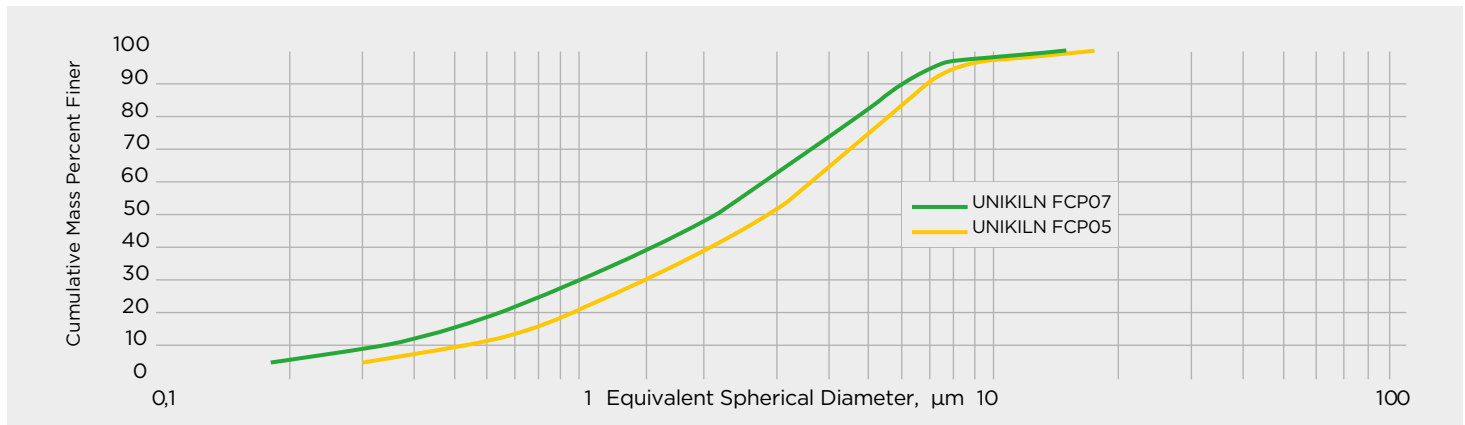
	SiC	Free-SiO <sub>2</sub>	Free-Si	Free-C	Fe <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub>	CaO
<b>100F</b>	99.5 %	0.15 %	0.15 %	0.10 %	0.02 %	0.005 %	0.005 %

### Typical sieve Analysis on ASTM sieve No

	50	100	120	140	200	325	< 325	LPD	TPD*
<b>100F</b>	0 %	2 %	17 %	22 %	35 %	23 %	1 %	1.59 gr/ml	1.82 gr/ml

\* J.Engelmann jolting volumeter

### Typical UNIKILN Sedimentation Curves (Sedigraph)



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