

SIKA® Unikiln FCP05 / FCP07 / 100F

Product information

Green silicon carbide powders for recrystallized (RSiC) and nitride-bonded (NSiC) technical ceramics.

Chemically treated, green silicon carbide designed 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 kiln furniture, semiconductor components and process materials.

Packaging 25 kg paper bags or 1.000 kg big bags.

Typical chemistry

	Free-Si	Free-C	Tot. Oxygen	S.S.A.	pH	Conductivity
FCP05	0.10%	0.25%	0.75%	5.0 m ² /g	4.5 - 5.5	na
FCP07	0.25%	0.30%	1.10%	7.0 m ² /g	4 - 5	10 µS
Analytical procedures:	ANSI B74.15		LECO	Micromeritics Gemini V	25 gr. SiC + 50 ml D.I.H ₂ O	5 gr. SiC + 100 ml D.I.H ₂ 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
FCP05	421	252	96	355	< 25	48	54	91	< 10	< 5
FCP07	614	235	95	202	47	42	39	72	< 10	< 5
Analytical Procedures:	X-RAY Fluorescence									

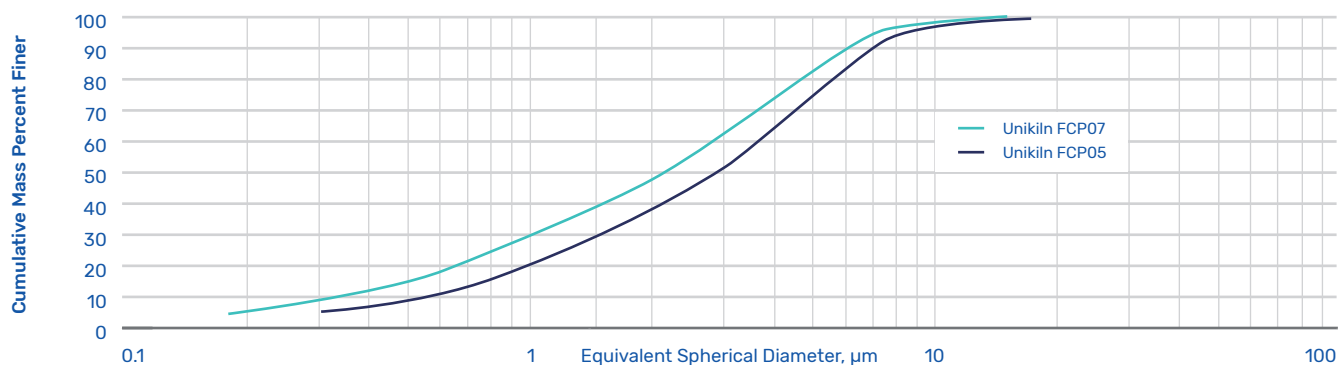
Typical analysis

	SiC	Free-SiO ₂	Free-Si	Free-C	Fe ₂ O ₃	Al ₂ O ₃	CaO
100F	99.5%	0.15%	0.15%	0.10%	0.02%	0.01%	0.01%

Typical sieve analysis on ASTM sieve No

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

Typical Unikiln sedimentation curves (Sedigraph)



The information contained in this Product Information Document is the sole property of Fiven, and cannot be distributed outside Fiven or its Customers, entirely or by parts, without the prior consent of Fiven. The Product Information Documents display typical characteristics for Fiven's products as currently produced in Fiven's various manufacturing locations. These typical characteristics do not constitute a precise Customer Specification, which has to be elaborated separately between the Customer and Fiven in the frame of a commercial offer. Only with this precise Customer Specification can Fiven be bound to any commitment or liability regarding the quality of its products.