

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-SiO ₂	Free-Si	Free-C	Tot. Oxygen	S.S.A.	pH	Conductivity
FCP05	0.70%	0.10%	0.25%	0.75%	5.0 m ² /g	4.5 - 5.5	na
FCP07	1.60%	0.25%	0.30%	1.10%	7.0 m ² /g	4 - 5	10 µS
Analytical procedures:	ANSI 74.15 1992			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	500	150	100	200	< 100	25	30	100	< 100	60
FCP07	600	250	140	250	< 100	30	50	150	< 100	50
Analytical procedures:	X-RAY Fluorescence									

Typical analysis

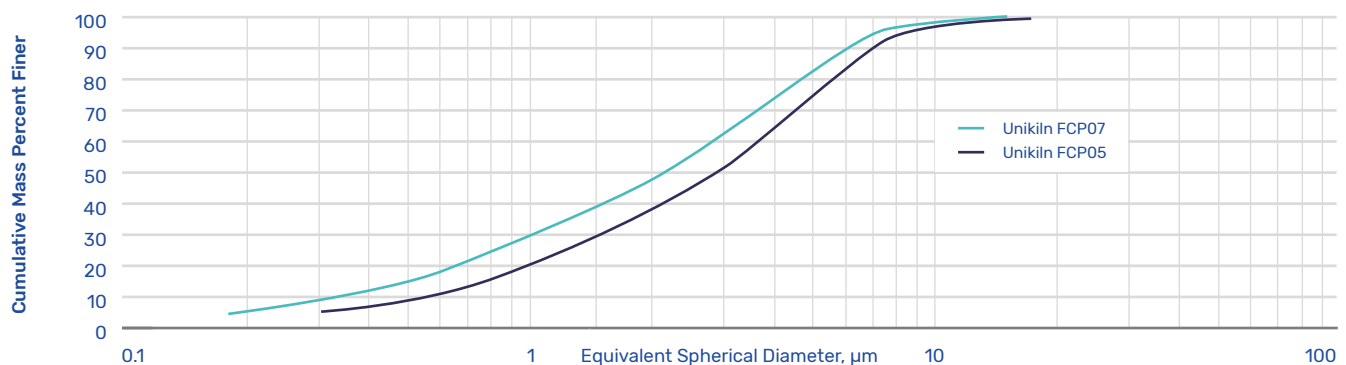
	SiC	Free-SiO ₂	Free-Si	Free-C	Fe ₂ O ₃	Al ₂ O ₃	CaO
100F	99.5%	0.15%	0.15%	0.10%	0.02%	0.005%	0.005%

Typical sieve analysis on ASTM sieve No

	50	100	120	140	200	325	< 325	LPD	TPD*
100F	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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