

SINTER GRADE SILICON CARBIDE POWDER

Sinter Grade Silicon Carbide powders are specially sized to aid in the manufacturing of sintered ceramic parts. They are typically fine powders with a specially tailored particle size distribution.

Panadyne offers a range of sinter grade powders to meet your specific application.



TYPICAL APPLICATIONS

Technical Ceramic Parts	Heat Transfer / Thermal Management
Sintered Parts	High Temp Sensors
Reaction-Bonded	Ceramic Wear Parts
Ceramic Parts	

TYPICAL PROPERTIES

High Hardness
Chemical Inertness
High Thermal Conductivity
Abrasion Resistance
Low Coefficient of Thermal Expansion
Thermal Shock Resistance
Strength at High Temperature Ranges



SINTER GRADE SILICON CARBIDE POWDER TECHNICAL DATA

TYPICAL CHEMICAL AND PHYSICAL ANALYSIS

	% Free SiO ₂	% Free Si	% Free C	% Total Oxygen	S.S.A. M ² /g	pH
FCP 10C	0,60	0,05	0,20	0,20	10 m ² /g	6-7
FCP 13	1,50	0,50	0,30	1,75	13 m ² /g	7-8
FCP 13C	0,70	0,05	0,15	0,75	13 m ² /g	6-7
FCP 15	1,20	0,10	0,20	1,10	15 m ² /g	6-7
FCP 15C	0,75	0,05	0,20	0,85	15 m ² /g	6-7
Analytic Procedure	ASNI B 74, 15 1986			LECO	Bet Quantachrome	25 Gr. SiC +50 MI D1 H ₂ O

TYPICAL TRACE ELEMENTS

Elements	Total Fe ppm	Total Al ppm	Total Ni ppm	Total V ppm	Total Na ppm	Total Cr ppm	Total Ca ppm	Total Ti ppm	Total Mg ppm	Total K ppm
FCP 10C	30	250	< 10	70	< 100	< 10	20	150	< 100	20
FCP 13	1500	1750								
FCP 13C	50	1200	< 10	60	< 100	< 10	20	200	< 100	20
FCP 15	250	250	< 10	70	< 100	< 10	20	150	< 100	20
FCP 15C	30	200	< 10	50	< 100	< 10	20	75	< 100	20
Analytic Procedure X Ray Fluorescence										