

Silicon carbide ready-to-press cohesive powder for hot pressing technical ceramics

SIKA® Protect C is a cutting-edge premix for hot pressing technical ceramics. It combines carefully selected sintering additives, a low temporary binder content, and pressing aids to deliver outstanding performance in ceramic fabrication. By utilizing a modified polymer and Kymera International's patented co-doping technology, SIKA® Protect C eliminates the need for phenol formaldehyde resins, resulting in a clean microstructure and exceptional physical properties. Experience enhanced hardness, strength, and overall superior characteristics with SIKA® Protect C, the future of hot pressing for technical ceramics.

Composition

	Sintering additives		Organic content	Moisture content	SiC type
	Carbon	Boron	%	%	
SIKA® Protect C	Modified polymer	Boron carbide	approx. 4%	approx. 0.5%	Std Sintex

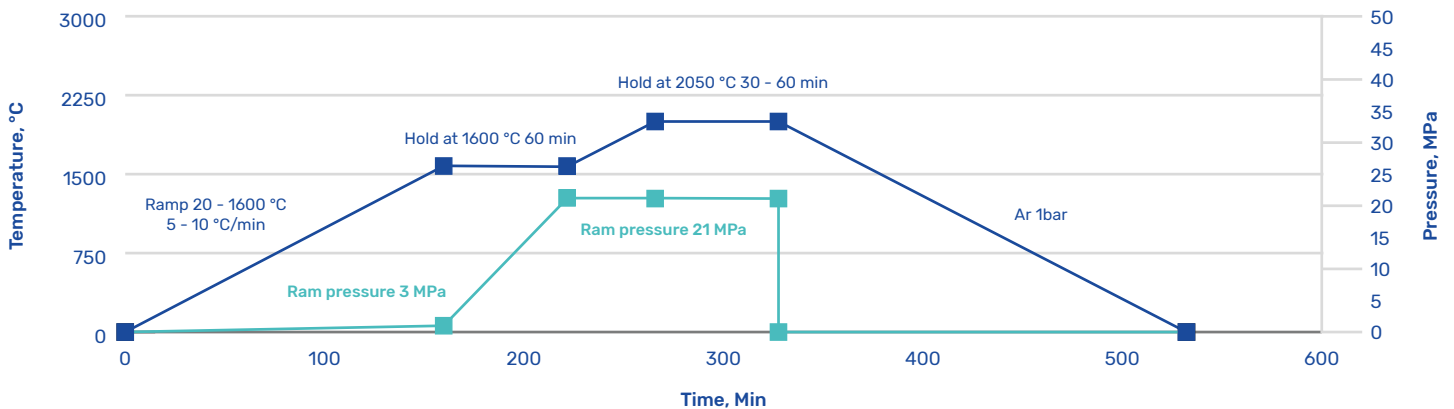
Typical powder properties

	Bulk density	Appearance
	g/cm ³	
SIKA® Protect C	0.4	Cohesive powder

Physical properties

	Density	Microhardness HV 1000	Indentation fracture toughness, K _{IC}	Bending strength
	g/cm ³	GPa	MPa/m	4 point MPa
SIKA® Protect C	3.20	26	3.5	600

Typical sintering cycles



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