SIKA® REFProducts for refractory applications



Black silicon carbide grains for refractory applications

This line of products is used for several refractory applications in the industry of iron, steel, ceramics, nonferrous metals, energy, chemical etc. Fiven has developed a special product for each application. New developments to adapt silicon carbide to the customers' needs are available on request.







SIKA® REF I, REF II, REF III and REF IV

For applications with standard requirements of temperature resistance and purity levels

Applications:

Aluminum reduction cells, copper industry, mortars, ramming pastes, tap hole clays, runners, filters, crucibles etc.

SIKA® REF I NI

Used in applications that require low magnetic iron content

Applications:

Kiln furniture, monolithics for blast furnace, desulfurization nozzles, heat exchangers, boiler linings, mortars, etc.

SIKA® REF I HG

For high performance refractories, presenting high density and low level of impurities (including low magnetic iron)

Applications

Trays, special casted pieces, gas cleaning, desulfurization nozzles, heat exchangers, reactors linings, tube protection, burner lining etc.



SIKA® REF Product information



Black SiC for refractory applications is available in various SiC quality grades and particle shape and size fractions. These characteristics are adapted to the specific refractory application and customer need.

Particle size fractions

All SiC quality grades can be supplied in different size ranges. Beside our standard splits, blends and fines, we can produce our grains according to customers' requirements.

Packaging 1.000 kg or 1.500 kg big bags or 25 kg paper bags. Silo trucks on request.

Size range

Products

Standard splits	0.1-0.5 / 0.2-0.5 / 0.5-1 / 1-2 / 1-3 / 2-3 / 3-5 (mm) and 6x10 / 7x12 / 10x18 / 14x30 / 18x34 / 34x70 / 36x70 / 80x180 (mesh)
Standard blends	0-0.2 / 0-0.35 / 0-0.5 / 0-1 (mm) and 80F / 50F / 35F / 10F / 6F
Standard fines	0-0.1 / 0-0.06 (mm), 4µm and 100F / 200F / 325F / 500F / 800F / 1200F / DIN70 / DCF

Grain shape and density

By various crushing and milling techniques, different grain shapes and bulk densities are obtained. We make the grain cubic or sharp-edged according to customer needs.

SiC quality grades SIKA® REF I

Typical chemistry

		SiC min %	MI	Typical application
	High Grade	98.5%	Max. 100 ppm	Kiln Furniture, Bricks and Tiles for Incinerators, Heat Exchanger Tubes,
	Non Iron	98%	100 - 350 ppm	Kiln Furniture, Bricks, Tiles and Mortars for Incinerators, Wear Resistance Pumps,
	Standard	98% / 97.5%	According to customer needs	Bricks and Monolithics for Blast Furnaces, Torpedo Laddle, Aluminum Reduction Cells, Crucibles, Foamglass,

SIKA® REF II

Typical chemistry

SiC min %		Typical application	Typical application	
Standard	95%	Bricks and Monolithics for Blast Furnaces, Tap Hole Clay, Runners, Crucibles, Ceramic Filters,	ners,	I

SIKA® REF III

Typical chemistry

SiC min %			Typical application
	Standard	90%	Monolithics, Tap Hole Clay, Mortars

SIKA® REF IV

Typical chemistry

SiC min %			Typical application	
	Standard	< 90%	Monolithics, Tap Hole Clay, Mortars	

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