

Chemical Compostion	Indexes %	Name	Available Size
SiO <sub>2</sub>	69.8	Acid-proof ceramic tile	150x150x15-30mm
Al <sub>2</sub> O <sub>3</sub>	22.5	Acid-proof ceramic tile	150x75x15-30mm
K <sub>2</sub> O	2.7	Acid-proof ceramic tile	100x100x10mm
Na <sub>2</sub> O	0.95	Acid-proof ceramic tile	50x50x10mm
CaO	0.82	Rectangle bricks	230x113x65mm
MgO	0.12	Rectangle bricks	230x65x65mm
Fe <sub>2</sub> O <sub>3</sub>	0.49	Transverse wedge bricks	230x113x65/55mm
Loss on Ignition	0.54	Transverse wedge bricks	230x113x25/55mm
Acid-resistance	99.8	Vertical wedge bricks	230x113x55/65mm
Alkali-resistance	93.0	Vertical wedge bricks	230x113x25/65mm
		Acid-proof Porcelain Nozzles	



### Properties of Sintered Acid-Proof Porcelain Nozzles, Tiles & Bricks

Parameters	Unit	Indexes	Test Standard
Density	g/cm <sup>3</sup>	2.20-2.40	ASTM
Porosity Rate (Volume percent)	%	9.3-10.5	ASTM
Water Absorption Rate (Weight percent)	%	4.2-4.7	ASTM
Heat Stability	950 -20°C	will not be broken within 30 cycles	DIN
Elasticity Modulus	MPa	2,138	DIN
Compression Strength	MPa	123	DIN
Bending Strength	MPa	≥ 40	DIN
Thermal Conductivity ( 400°C )	w/m.k	1.175	DIN
Thermal Expansion Coefficient ( 1,000°C )	1/°C	3.2 x 10 <sup>-6</sup>	DIN
Thermal Expansion Rate ( 1,000°C )	%	0.31	DIN
Mohs' Hardness Scale	Grade	6.5	DIN
Acid Resistance	%	>99.8	DIN
Alkali Resistance	%	>93	
Abrasion	g/cm <sup>2</sup>	0.06	JC260-80
Length Error	%	≤ ±1	
Bend Error	%	<0.5	