

SILRATH

Andalusite High Alumina Bricks

SILRATH andalusite base bricks are dense, high alumina bricks with very low flux levels and relatively low porosity. **SILRATH** bricks are characterized by excellent high temperature load resistance and outstanding thermal shock resistance. This exceptional resistance to thermal shock allows these brick to withstand repeated cycles of up to 120 times from a hot furnace to a cold bath.



Properties	Units	AK 60	AK 70
Density	lbs/ft ³	162	168
	(g/cm ³)	(2.6)	(2.7)
Apparent Porosity	%	≤12	≤15
Cold Crushing Strength	Psi	10,100	13,000
	MPa	70	100
Creep in compression@ constant temp. 0.1 Mpa Test Temp. 1500°C	e ₂₅ [%]	2.11	2.7
	s ₂₅₋₁₅ [%]	0.034	0.052
Thermal Shock Resistance DIN 51068 Part 1	Cycles	> 120	> 100
Thermal Conductivity by the hot wire method:	°C		
	At 800°C	2.02	2500
	At 1000°C	2.12	2320
	At 1200°C	2.32	1160
	At 1400°C	2.64	580
Chemical Analysis	%		
	Al ₂ O ₃	61	70
	SiO ₂	36	28
	Fe ₂ O ₃	≤1.8	1

The test data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.