

SKAMOL Moler insulating brick HIPOROS
for back-up insulation - up to 900°C (1652°F)



Grade	HIPOROS	
Maximum service temperature		
	°C	900
	°F	1652
Bulk density, dry		
	kg/m ³	570
	lbs/cu.ft.	36
Cold crushing strength (EN 1094-5:1995)		
@ room temperature	MPa	1.6
	lbs/sq.in.	232
Modulus of rupture (EN 993-6:1995)		
	MPa	0.5
	lbs/sq.in.	73
Total porosity (EN 1094-4: 1995)		
	%	76
Permeability to air (BS EN 993-4: 1995)		
	nPm	16.5
Creep in compression (EN 993-9: 1997)		
50 h at 100°C (180°F) below max. service temperature load 0.1 MPa (14.5 lbs/sq.in.)	%	1.5
Specific heat		
	KJ/(kg×K)	0.70
	BTU/(lb×°F)	0.17
Coefficient of reversible thermal expansion (BS 1902: section 5.3: 1990)		
@ 20°C-750°C (68°F-1382°F)	K ⁻¹	3.0x10 ⁻⁶
	°F ⁻¹	1.6x10 ⁻⁶
Resistance to thermal shock (EN 993-11: 1998)		
	cycles	> 30
Linear reheat shrinkage (EN 1094-6: 1999)		
	%	1.0
Pyrometric cone equivalent (ASTM C24-89 ORTON cones)		
	°C	1200
	°F	2192
Thermal conductivity (ASTM C-182 supplemented by ASTM C-201)		
mean temp. @ 200°C	W/(m×K)	0.11
@ 400°C		0.12
@ 600°C		0.13
@ 392°F	BTU/(sq.ft×h×°F/in)	0.76
@ 752°F		0.83
@ 1112°F		0.90
Chemical analysis, typical	%	
Silica	SiO ₂	72
Titanium oxide	TiO ₂	0.7
Ferric oxide	Fe ₂ O ₃	7.0
Alumina	Al ₂ O ₃	8.0
Magnesium oxide	MgO	1.2
Calcium oxide	CaO	6.5
Sodium oxide	Na ₂ O	0.4
Potassium oxide	K ₂ O	1.5
Sulphur trioxide	SO ₃	1.2
Loss on ignition 1025°C (1877°F)	LOI	1.5
Colour		red
HS Tariff number (Harmonized Commodity Description and Coding System)		6901.00.00

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Data are average results of tests conducted under standard procedures and are subject to variation. Data contained in this data sheet are supplied in good faith as a technical service and are subject to change without notice. Misprint and errors excepted.

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