

SKAMOL Moler insulating brick HIPOR

for back-up insulation - up to 900°C (1652°F)



Grade	HIPOR
Maximum service temperature	
°C	900
°F	1652
Bulk density, dry	
kg/m ³	550
lbs/cu.ft.	34
Cold crushing strength (EN 1094-5:1995)	
@ room temperature	MPa
	1.4
	lbs/sq.in.
	203
Modulus of rupture (EN 993-6:1995)	
	MPa
	0.5
	lbs/sq.in.
	73
Total porosity (EN 1094-4: 1995)	
	%
	77
Permeability to air (BS EN 993-4: 1995)	
	nPm
	18.5
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.)	%
	1.3
Specific heat	
	kJ/(kg×K)
	0.80
	BTU/(lb×°F)
	0.19
Coefficient of reversible thermal expansion (BS 1902: section 5.3: 1990)	
@ 20°C-750°C (68°F-1382°F)	K ⁻¹
	2.0x10 ⁻⁶
	°F ⁻¹
	1.1x10 ⁻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
	1350
	°F
	2462
Thermal conductivity (ASTM C-182 supplemented by ASTM C-201)	
mean temp. @ 200°C	W/(m×K)
	0.09
@ 400°C	
	0.10
@ 600°C	
	0.11
	@ 392°F
	BTU/(sq.ft×h×°F/in)
	0.63
	@ 752°F
	0.70
	@ 1112°F
	0.78
Chemical analysis, typical	
	%
Silica	SiO ₂
	77
Titanium oxide	TiO ₂
	0.7
Ferric oxide	Fe ₂ O ₃
	7.0
Alumina	Al ₂ O ₃
	9.0
Magnesium oxide	MgO
	1.3
Calcium oxide	CaO
	0.8
Sodium oxide	Na ₂ O
	0.4
Potassium oxide	K ₂ O
	1.6
Sulphur trioxide	SO ₃
	1.0
Loss on ignition 1025°C (1877°F)	LOI
	1.0
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.

February 2010