

SKAMOL Moler insulating brick POROS

for back-up insulation - up to 950°C (1742°F)



Grade	POROS*	
Maximum service temperature		
	°C	950
	°F	1742
Bulk density, dry		
	kg/m ³	650
	lbs/cu.ft.	41
Cold crushing strength (EN 1094-5:1995)		
@ room temperature	MPa	3.5
	lbs/sq.in.	508
Modulus of rupture (EN 993-6:1995)		
	MPa	1.0
	lbs/sq.in.	145
Total porosity (EN 1094-4: 1995)		
	%	72
Permeability to air (BS EN 993-4: 1995)		
	nPm	6.0
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)	0.80
	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	3.0×10 ⁻⁶
	°F ⁻¹	1.6×10 ⁻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)	0.13
@ 400°C		0.15
@ 600°C		0.17
@ 392°F	BTU/(sq.ft×h×°F/in)	0.90
@ 752°F		1.04
@ 1112°F		1.18
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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*) The POROS grade corresponds to SM-65 grade.

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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