SKAMOL VIP-900

Hot-face and back-up insulation for iron & steel industries

Maximum service temperature		
	°C	1150
	°F	2102
Bulk density, dry		
	kg/m^3	900
	lbs/cu.ft.	56
Compressive strength (EN 1094-5: 1995)		
@ room temperature	MPa	6.3
	lbs/sq.in.	914
Modulus of rupture (EN 993-6: 1995)		
	MPa	2.1
	lbs/sq.in.	305
Apparent porosity		
	%	67
Specific heat		
	kJ/(kg×K)	0.97
	BTU/(lb×°F)	0.23
Coefficient of reversible thermal expansion (BS 1902: section 5.3: 1990)		
@ 20°C-750°C (68°F-1382°F)	K^{-1}	$10.5x10^{-6}$
	$°F^{-1}$	$5.9x10^{-6}$
Resistance to thermal shock (EN 993-11: 1998)		
heating to 950°C (1742°F)	cycles	-
Linear reheat shrinkage (EN 1094-6: 1999)		
12 h at 1100°C (2012°F)		1.2
Pyrometric cone equivalent (ASTM C24-89 ORTON cones)		
	°C	1310
	°F	2390
Thermal conductivity (ASTM C-182)		
mean temp. @ 200°C	W/(m×K)	0.23
@ 400°C		0.25
@ 600°C		0.26
@ 800°C		0.28
@ 1000°C		0.30
@ 392°F	BTU/(sq.ft.×h×°F/in)	1.59
@ 752°F		1.73
@ 1112°F		1.80
@ 1472°F		1.94
@ 1832°F		2.08
Chemical analysis, typical	%	
Silica	SiO_2	48
Titanium dioxide	TiO_2	1.5
Ferric oxide	Fe_2O_3	5.4
Alumina	Al_2O_3	16
Magnesium oxide	MgO	14
Calcium oxide	CaO	3.4
Sodium oxide	Na_2O	0.1
Potassium oxide	K_2O	6.8
Loss on ignition 1025°C (1877°F)	LOI	3.6
Colour		SAND
HS Tariff number		
(Harmonized Commodity Description and Coding System)		6806.90.00

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.

Note: The TC value at 1000°C (1832°F) is estimated.

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