



SKAMOL VIP-12 HS

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



Maximum service temperature (PrEN 14306:2002)		
	°C	1150
	°F	2102
Bulk density, dry		
	kg/m ³	1225
	lbs/cu.ft.	77
Compressive strength (EN 1094-5: 1995)		
@ room temperature	MPa	18.5
	lbs/sq.in.	2683
Modulus of rupture (EN 993-7:1998)		
	MPa	5.0
	lbs/sq.in.	725
Total porosity (EN 1094-4: 1995)		
	%	55
Specific heat		
	kJ/(kg×K)	1.0
	BTU/(lb×°F)	0.24
Coefficient of reversible thermal expansion (BS 1902: section 5.3: 1990)		
@ 20°C-750°C (68°F-1382°F)	K ⁻¹	10×10 ⁻⁶
	°F ⁻¹	5.6×10 ⁻⁶
Linear reheat shrinkage (EN 1094-6: 1999)		
12 h at 1100°C (2012°F)	%	0.9
Pyrometric cone equivalent (ASTM C24-89 ORTON cones)		
	°C	1330
	°F	2426
Thermal conductivity (EN 993-15:1998) Hot wire		
mean temp. @ 200°C	W/(m×K)	0.27
@ 400°C		0.29
@ 600°C		0.30
@ 800°C		0.32
@ 1000°C		0.33
@ 392°F	BTU/(sq.ft.×h×°F/in)	1.87
@ 752°F		1.98
@ 1112°F		2.08
@ 1472°F		2.18
@ 1832°F		2.29
Chemical analysis, typical		
	%	
Silica	SiO ₂	48
Titanium dioxide	TiO ₂	1.1
Ferric oxide	Fe ₂ O ₃	3.5
Alumina	Al ₂ O ₃	27
Magnesium oxide	MgO	7.4
Calcium oxide	CaO	4.7
Sodium oxide	Na ₂ O	0.3
Potassium oxide	K ₂ O	6.2
Loss on ignition 1025°C (1877°F)	LOI	2.4
Colour		SAND
HS Tariff number		
(Harmonized Commodity Description and Coding System)		6806.90.00

Note: The TC value for Skamol VIP-12 HS at 1000°C (1832°F) is estimated.

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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