

SUPER-1100 E

for back-up insulation up to 1100°C (2012°F)



Grade		SUPER-1100 E			
Maximum service temperature	°C	1100			
	°F	2012			
Bulk density, dry	kg/m ³	245			
	lbs/cu.ft.	15			
Cold crushing strength (DS/EN ISO 8895_2006)	MPa	2.7			
	lbs/sq.in.	392			
Modulus of rupture (EN 993-6:1995)	MPa	1.3			
	lbs/sq.in.	188.5			
Linear reheat shrinkage (EN 1094-6:1999) 12h @ 1050°C (1922°F)	%	1.5			
Total porosity (EN 1094-4:1995)	%	90			
Creep in compression (EN 993-9:1997) 50 h @ 900°C (1652°F), load 0.1 Mpa (14.5 lbs./sq.in.)	%	0.4			
Permeability to gases (EN 993-4:1995)	nPm	0.5			
Specific heat	kJ/(kg×K)	0.84			
	BTU/(lb×°F)	0.20			
Coefficient of reversible thermal expansion (BS 1902: section 5.3:1990) @ 20 - 750°C (68 - 1382°F)	x10 ⁻⁶ K ⁻¹	5.5			
	x10 ⁻⁶ °F ⁻¹	3.1			
Pyrometric cone equivalent (ASTM C24-09 (13) Orton cones)	°C	1349			
	°F	2460			
Thermal conductivity (ASTM C-182)	mean temp. @	@ 200°C	W/(m×K)	0.08	
		@ 400°C		0.10	
		@ 600°C		0.12	
		@ 800°C		0.14	
		@ 392°F	BTU/(sq.ft.xh×°F/in.)		0.55
		@ 752°F			0.69
		@ 1112°F			0.83
		@ 1472°F			0.97
Chemical analysis, typical			%		
	Silica			SiO ₂	47
	Alumina			Al ₂ O ₃	0.3
	Ferric oxide			Fe ₂ O ₃	0.3
	Magnesium oxide			MgO	0.6
	Calcium oxide			CaO	43
	Sodium oxide			Na ₂ O	0.1
	Potassium oxide			K ₂ O	0.1
Loss on ignition @1025°C (1877°F)			LOI	8	
Non-combustibility test: (EN 13501-1:2007 + A1:2009)				Class A2-s1,d0	
HS Tariff number (Harmonized Commodity Description and Coding System)				6806.90.00	
Colour				GREY	

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.