

SUPER-ISOL

for back-up insulation up to 1000°C (1832°F)



Grade		SUPER-ISOL		
Maximum service temperature		°C	1000	
		°F	1832	
Bulk density, dry		kg/m ³	225	
		lbs/cu.ft.	14.0	
Cold compressive strength (EN 1094-5:1995) @ room temperature		MPa	2.6	
		lbs/sq.in.	377	
Modulus of rupture (EN 993-6:1995)		MPa	1.3	
		lbs/sq.in.	189	
Linear reheat shrinkage (EN 1094-6:1999) 12h @ 950°C (1742°F)		%	1.0	
Total porosity (EN 1094-4:1995)		%	91	
Creep in compression (EN 993-9:1997) 50 h @ 900°C (1652°F)		%	0.5	
Permeability to air (EN 993-4:1995)		nPm	0.7	
Specific heat		kJ/(kg×K)	0.84	
		BTU/(lb×°F)	0.20	
Coefficient of reversible thermal expansion @ 20°C-750°C (68°F-1382°F)		x10 ⁻⁶ K ⁻¹	5.5	
		x10 ⁻⁶ °F ⁻¹	3.1	
Pyrometric Cone Equivalent (ASTM C24-89 Orton cones)		°C	1345	
		°F	2453	
Thermal conductivity (ASTM C-182) Measured perpendicular to large faces	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
Ferric oxide		Fe ₂ O ₃		0.1
Alumina		Al ₂ O ₃		0.2
Magnesium oxide		MgO		0.4
Calcium oxide		CaO		42
Sodium oxide		Na ₂ O		0.1
Potassium oxide		K ₂ O		0.1
Loss on ignition 1025°C (1877°F)		LOI		9
Non-combustibility test: (EN 13501-1:2007 + A2:2009)			Class A2-s1, d0 non-combustible	
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.

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.	15.3	
Cold compressive strength (EN 1094-5:1995) @ room temperature	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 @ 50°C (90°F)	%	1.5	
Total porosity (EN 1094-4:1995)	%	90	
Creep in compression (EN 993-9:1997) 50 h @ 900°C (1652°F)	%	0.4	
Permeability to air (EN 993-4:1995)	nPm	0.5	
Specific heat	kJ/(kg×K)	0.84	
	BTU/(lb×°F)	0.20	
Coefficient of reversible thermal expansion @ 20°C-750°C (68°F-1382°F)	x10 ⁻⁶ K ⁻¹	5.5	
	x10 ⁻⁶ °F ⁻¹	3.1	
Pyrometric Cone Equivalent (ASTM C24-89 Orton cones)	°C	1345	
	°F	2453	
Thermal conductivity (ASTM C-182) Measured perpendicular to large faces	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.×h×°F/in.) 0.55	
	@ 752°F	0.69	
	@ 1112°F	0.83	
	@ 1472°F	0.97	
Chemical analysis, typical	%		
Silica	SiO ₂	47	
Ferric oxide	Fe ₂ O ₃	0.3	
Alumina	Al ₂ O ₃	0.3	
Magnesium oxide	MgO	0.6	
Calcium oxide	CaO	45	
Sodium oxide	Na ₂ O	0.1	
Potassium oxide	K ₂ O	0.1	
Loss on ignition 1025°C (1877°F)	LOI	6	
Non-combustibility test: (EN 13501-1:2007 + A2:2009)	Class A2-s1, d0 non-combustible		
HS Tariff number (Harmonized Commodity Description and Coding System)	6806.90.00		
Colour	GREY		

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