

SKAMOL SUPER-ISOL calcium silicate insulating boards
for back-up insulation up to 1000°C (1832°F)



Skamol A/S
Østergade 58-60
DK-7900 Nykøbing Mors
Denmark
Tel: +45 9772 1533
Fax: +45 9772 4975
insulation@skamol.dk

www.skamol.com

Grade	SUPER-ISOL	
Maximum service temperature (EN 14306:2009)		
	°C	1000
	°F	1832
Bulk density, dry (EN 1094-4)		
	kg/m ³	225
	lbs/cu.ft.	14
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
Total porosity (EN 1094-4:1995)		
	%	91
Permeability to air (BS EN 993-4: 1995)		
	nPm	0.7
Creep in compression (EN 993-9: 1997)		
50 h at 900°C (1652°F), load 0.1 MPa (14.5 lbs/sq.in.)	%	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°C-750°C (68°F-1382°F)	K ⁻¹	5.5x10 ⁻⁶
	°F ⁻¹	3.1x10 ⁻⁶
Linear reheat shrinkage (EN 1094-6: 1999)		
12 h at 50°C (90°F) below max. service temp.	%	1.0
Pyrometric cone equivalent (ASTM C24-89 ORTON cones)		
	°C	1345
	°F	2453
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×h×°F/in)	0.55
@ 752°F		0.69
@ 1112°F		0.83
@ 1472°F		0.97
Chemical analysis, typical		
Silica	SiO ₂	45
Alumina	Al ₂ O ₃	0.2
Ferric oxide	Fe ₂ O ₃	0.2
Magnesium oxide	MgO	0.7
Calcium oxide	CaO	45
Sodium oxide	Na ₂ O	0.1
Potassium oxide	K ₂ O	0.2
Loss on ignition 1025°C (1877°F)	LOI	8
Non-combustibility tests (EN 13501-1:2007 + A2:2009)		
Classification	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.

October 2012