

ISOPERLOR 550P Perlite insulating bricks & blocks

for back-up insulation - up to 900°C (1652°F)



Maximum service temperature	°C	900
	°F	1652
Bulk density, dry	kg/m ³	550
	lbs/cu.ft.	34
Cold crushing strength (EN 1094-5: 1995) @ room temperature	MPa	2.0
	lbs/sq.in.	290
Modulus of rupture (EN 993-6: 1995)	MPa	0.5
	lbs/sq.in.	73
Total porosity	%	77
Permeability to air (BS EN 993-4: 1995)	nPm	3.4
Creep in compression (EN 993-9: 1997) after fluoride gas exposure, 50h at 800°C (1472°F), load 0.1 MPa (14.5 lbs/sq.in.)	%	0.4
Change after fluoride gas exposure (ALILAB/SINTEF method) 48h at 850°C (1562°F)	Weight%	9.6
	Volume%	7.5
Specific heat	kJ/(kg×K)	0.7
	BTU/(lb×°F)	0.17
Coefficient of reversible thermal expansion (BS 1902: section 5.3: 1990) @ 20°C-750°C (68°F-1382°F)	K ⁻¹	1×10 ⁻⁶
	°F ⁻¹	5.8×10 ⁻⁶
Linear reheat shrinkage (EN 1094-6: 1999)	%	1.4
Pyrometric cone equivalent (ASTM C24-89 ORTON cones)	°C	1230
	°F	2246
Thermal conductivity (ASTM C-182 supplemented by ASTM C-201)	W/(m×K)	0.11
mean temp. @ 200°C	W/(m×K)	0.12
mean temp. @ 400°C	W/(m×K)	0.14
mean temp. @ 600°C	BTU/(sq.ft.×h×°F/in.)	0.76
mean temp. @ 392°F	BTU/(sq.ft.×h×°F/in.)	0.83
mean temp. @ 752°F	BTU/(sq.ft.×h×°F/in.)	0.97
mean temp. @ 1112°F	%	
Chemical analysis, typical		
Silica	SiO ₂	36
Titanium oxide	TiO ₂	0.1
Ferric oxide	Fe ₂ O ₃	2.3
Alumina	Al ₂ O ₃	6.0
Magnesium oxide	MgO	0.9
Calcium oxide	CaO	38
Sodium oxide	Na ₂ O	1.4
Potassium oxide	K ₂ O	1.5
Sulphur trioxide	SO ₃	1.1
Loss on ignition 1025°C (1877°F)	LOI	12
Colour		Grey

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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.

Skamol A/S is DS/EN ISO 9001 certified.