

ISOPERLOR 550P Perlite insulating bricks & blocks

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



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|--|--------------------------------|----------------------|
| 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) | | |
| mean temp. @ 200°C | W/(m×K) | 0.11 |
| mean temp. @ 400°C | W/(m×K) | 0.12 |
| mean temp. @ 600°C | W/(m×K) | 0.14 |
| mean temp. @ 392°F | BTU/(sq.ft.×h×°F/in.) | 0.76 |
| mean temp. @ 752°F | BTU/(sq.ft.×h×°F/in.) | 0.83 |
| mean temp. @ 1112°F | BTU/(sq.ft.×h×°F/in.) | 0.97 |
| 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.