

**SKAMOL Moler insulating brick M-EXTRA**  
for back-up insulation - up to 1000°C (1832°F)



| Grade  | M-EXTRA                        |                      |
|--|--------------------------------|----------------------|
| <b>Maximum service temperature</b>   |                                |                      |
|  | °C                             | 1000                 |
|  | °F                             | 1832                 |
| <b>Bulk density, dry</b>   |                                |                      |
|  | kg/m <sup>3</sup>              | 950                  |
|  | lbs/cu.ft.                     | 59                   |
| <b>Cold crushing strength (EN 1094-5:1995)</b>   |                                |                      |
| @ room temperature   | MPa                            | 18.0                 |
|  | lbs/sq.in.                     | 2610                 |
| <b>Modulus of rupture (EN 993-6:1995)</b>  |                                |                      |
|  | MPa                            | 4.0                  |
|  | lbs/sq.in.                     | 580                  |
| <b>Total porosity (EN 1094-4: 1995)</b>  |                                |                      |
|  | %                              | 60                   |
| <b>Permeability to air (BS EN 993-4: 1995)</b>   |                                |                      |
|  | nPm                            | 0.5                  |
| <b>Creep in compression (EN 993-9: 1997)</b>   |                                |                      |
| 50 h at 100°C (180°F) below max. service temperature<br>load 0.1 MPa (14.5 lbs/sq.in.) | %                              | 1.5                  |
| <b>Specific heat</b>   |                                |                      |
|  | KJ/(kg×K)                      | 0.80                 |
|  | BTU/(lb×°F)                    | 0.19                 |
| <b>Coefficient of reversible thermal expansion (BS 1902: section 5.3: 1990)</b>        |                                |                      |
| @ 20°C-750°C (68°F-1382°F)   | K <sup>-1</sup>                | 3.0x10 <sup>-6</sup> |
|  | °F <sup>-1</sup>               | 1.6x10 <sup>-6</sup> |
| <b>Resistance to thermal shock (EN 993-11: 1998)</b>                                   |                                |                      |
|  | cycles                         | > 30                 |
| <b>Linear reheat shrinkage (EN 1094-6: 1999)</b>                                       |                                |                      |
|  | %                              | 1.0                  |
| <b>Pyrometric cone equivalent (ASTM C24-89 ORTON cones)</b>                            |                                |                      |
|  | °C                             | 1350                 |
|  | °F                             | 2462                 |
| <b>Thermal conductivity (ASTM C-182 supplemented by ASTM C-201)</b>                    |                                |                      |
| mean temp. @ 200°C   | W/(m×K)                        | 0.22                 |
| @ 400°C  |                                | 0.24                 |
| @ 600°C  |                                | 0.25                 |
| @ 800°C  |                                | 0.26                 |
| @ 392°F  | BTU/(sq.ft×h×°F/in)            | 1.53                 |
| @ 752°F  |                                | 1.66                 |
| @ 1112°F   |                                | 1.73                 |
| @ 1472°F   |                                | 1.80                 |
| <b>Chemical analysis, typical</b>  | %                              |                      |
| Silica   | SiO <sub>2</sub>               | 77                   |
| Titanium oxide   | TiO <sub>2</sub>               | 0.7                  |
| Ferric oxide   | Fe <sub>2</sub> O <sub>3</sub> | 7.0                  |
| Alumina  | Al <sub>2</sub> O <sub>3</sub> | 9.0                  |
| Magnesium oxide  | MgO                            | 1.3                  |
| Calcium oxide  | CaO                            | 0.8                  |
| Sodium oxide   | Na <sub>2</sub> O              | 0.4                  |
| Potassium oxide  | K <sub>2</sub> O               | 1.6                  |
| Sulphur trioxide   | SO <sub>3</sub>                | 1.0                  |
| Loss on ignition 1025°C (1877°F)   | LOI                            | 1.0                  |
| <b>Colour</b>  |                                | red                  |
| <b>HS Tariff number</b>  |                                |                      |
| (Harmonized Commodity Description and Coding System)                                   |                                | 6901.00.00           |

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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.