

Snow Shoe Refractories, LLC

895 Clarence Road, P. O. Box 276
Snow Shoe, PA 16874
Tel: (814) 387-6811 • Fax: (814) 387-6209

ALU-DRI® 85

Product Data

Scope:

A phosphate bonded 85% alumina brick especially designed for molten aluminum contact applications, exhibiting excellent non-wetting characteristics.

Chemical Analysis (Wt.% - Calcined Basis)

| | |
|--------------------------------|------|
| SiO ₂ | 7.2 |
| Al ₂ O ₃ | 83.3 |
| TiO ₂ | 2.6 |
| Fe ₂ O ₃ | 1.0 |
| CaO | 0.1 |
| MgO | 0.1 |
| Alkalies | 0.1 |
| P ₂ O ₅ | 2.8 |
| Other | 2.8 |

Physical Properties

| | <u>English Units</u> | <u>SI Units</u> |
|--|-------------------------------------|-------------------------------------|
| Bulk Density | (lbs/ft ³) 180 - 185 | (kg/m ³) 2880 - 2970 |
| Apparent Porosity (%) | | 13.5 - 16.5 |
| Modulus of Rupture | (psi) | (MPa) |
| at 68°F (20°C) | 2700 - 3500 | 18.7 - 24.2 |
| at 1500°F (815°C) | 4000 - 5000 | 27.6 - 34.6 |
| at 2000°F (1100°C) | 1800 - 2300 | 12.4 - 15.9 |
| Crushing Strength | (psi) | (MPa) |
| at 68°F (20°C) | 13,000 - 22,000 | 89.8 - 152.0 |
| Linear Change (%) after 2640°F (1450°C) reheat | | +0.2 to +0.6 |
| Thermal Conductivity | (Btu-in/hr/ft ² /°F) | (W/m/K) |
| at 400°F (205°C) | 17.9 | 2.58 |
| at 1200°F (650°C) | 14.1 | 2.03 |
| at 1600°F (870°C) | 12.3 | 1.77 |

The data given above are average results of our common sized products and are subject to variation. One standard deviation is given when adequate data is available. These results should not be used for specification purposes.

324011/2-01