

AC 50

VIBRO-CAST LIME STABILISED ZIRCONIA FIRED REFRACTORIES

Typical Chemical Analysis

	%
SiO ₂	0.85
TiO ₂	0.18
Fe ₂ O ₃	0.07
Al ₂ O ₃	0.71
CaO	3.99
MgO	0.15
ZrO ₂ + HfO ₂	93.86

Physical Properties

Apparent Porosity (%)	20
Bulk Density (kg/m ³)	4580

Thermal Properties

Specific heat (J/kgK)	500-810	(20°C - 2000°C)
Thermal conductivity (W/mK)	0.8-1.8	(20°C - 2000°C)
Coefficient of thermal expansion (K ⁻¹)	6.2-9.6 x 10 ⁻⁶	(20°C - 1600°C)

General Properties

Maximum Service Temperature (°C)	2000	
Specific Resistance (Ωcm)	2.8 - 1.0	(1250°C - 2000°C)

Zirconia materials utilize partially stabilized zirconia to enhance the thermal shock resistance; under repeated temperature cycling, lime stabilised zirconia is the more stable. The figures are typical and do not constitute or imply a specification. All Zirconia Fired Refractories are manufactured to specifically designed formulae of grain sizes and bonds, depending on the application for which they are used.

The above information is, to the best of our knowledge, correct at the time of writing, but is given without guarantee or responsibility since the conditions of use are beyond our control. Magna Industrials Ltd disclaim liability for loss or damage suffered from use of this data and no liability is accepted for use of this product which infringes any patent.