



IRAN REFRACTORIES COMPANY

TECHNICAL DATA SHEET



ALMACAST

Temperature Service:	1650 °C
Classification:	High Alumina Castable (medium cement).
Main Raw Material Component:	Blended mixture of carefully sized Bauxite and low Iron calcium aluminate binder .
Type Of Bond:	Hydraulic
Grain Size	0 – 5 mm
Water required For Pouring	9 – 11 %
Dry Castable Required	2400 Kg/m ³
Features and Main Applications:	Excellent workability and setting properties to provide high refractoriness, Volume stability and excellent thermal shock resistance. Recommended for most high temperature metallurgical furnaces. Particularly designed for casting monolithic hearths , walls , electric furnace roofs , burner blocks and ladle lining. Excellent workability and setting properties. Volume stability and excellent thermal shock resistance.

Chemical Composition (Calcined base)

Al ₂ O ₃ %	SiO ₂ %	Fe ₂ O ₃ %	CaO %	TiO ₂ %
68 – 70	21 – 23	1.5 – 2.0	2.0-3.0	2.0-3.0

Thermomechanical Properties

		After drying at 110 °C	After heating at 1470 °C
Bulk Density	(Kg/m ³)	> 2450	–
Cold Crushing Strength	(kg/cm ²)	220-450	500-700
Modulus of Rupture	(kg/cm ²)	35-90	80-110
Linear Change	(%)	Negligible	– 1.0 to 0.0

All data based on cast specimens .ASTM procedures , where applicable , used for determination of data .

For data of vibration cast or gunned , consult our sales & Engineering service's experts.

All data subject to reasonable deviations , and therefore , should not be used for specification purposes. ASTM Test Methods, where applicable, used for determination of data.

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