

ElectroCast[™] 370

TECHNICAL DATA SHEET

ElectroCast[™] 370 is a mullite based, low moisture castable designed to be installed by vibration casting.

- Based on Reno's proprietary Electro Chemical bond system featuring an electrolyte for maximum performance.
- Rapid dry out capability while still retaining very low porosity.
- Micro porosity of bond phase has greatly reduced reactivity to corrosive vapors in the process.
- High hot strength and abrasion resistance.
- Low porosity and permeability for reduced penetration and reaction with molten metals, slags, and vapors.
- Recommended for molten iron transport vessels such as ladles, spouts, covers, etc. where low to moderate slag is present.

Service Temperature: 3000°F Electrolyte Type: E3

Addition Quantity: 4.25 – 4.75% (wt.)

Wt. Required for Estimating: 160 lb/ft³ Storage Life: 6 months

TYPICAL CHEMICAL ANALYSIS (% Calcined Basis)

Al_2O_3	SiO ₂	Fe ₂ O ₃	TiO_2	Other
70	27	0.7	2	0.35

TYPICAL PHYSICAL PROPERTIES

Prefire Temperature (°F)	Modulus of Rupture (psi)	CCS (psi)	Density (pcf)	Porosity (%)	Linear Change (%)	Permeability (mDarcy)	Thermal k (Btu/in/ft2/hr)	Surface Area (m2/g)				
250	1,024	9,009	158.9	12.9	-0.13	0.095	12.4	3.48				
750	1,203	5,089	157.5	12.7	0.07	0.154	12.0	3.86				
1500	1,799	18,898	160.3	12.9	0.10	0.216	11.8	2.27				
2000	3,790	15,684	162.3	12.8	-0.30	3.53	11.7	0.44				
2500	3,176	34,068	156.6	11.8	0.11	5.43	11.6	0.14				
2800	2,843	12,572	156.1	12.1	0.37	3.57	11.6	0.11				

Thermal Expansion Coefficient: 2.84E-6 in/in/°F (ASTM C832)
Thermal Cycle Loss (after 2000°F): 36.4% MOR Loss (ASTM C-1171)

Hot MOR at 2500°F: 2561 psi (ASTM C583) Hot MOR at 2750°F: 784 psi (ASTM C583)

Abrasion Loss After 1500°F: 3.4 cc (ASTM C704) Abrasion Loss After 2500°F: 2.8 cc (ASTM C704)

PACKAGING: 55 lb. Bags, 72 per Pallet (3960 lbs.) 1500 lb. Bags, 2 per Pallet (3000 lbs.) 2000 lb. Bags, 2 per Pallet (4000 lbs.) 20-081 A Revised BP 10/5/2021 pin#190920

The data presented represents typical average results obtained by testing under ASTM or other acceptable procedures as required. They are subject to normal variations and should not be used for specification purposes.