RENO REFRACTORIES, INC   **ElectroPump™ 1152 AR**

TECHNICAL DATA SHEET

ElectroPump™ 1152 AR is a high alumina, silicon-carbide, zirconia, no cement castable designed for cast/pump installations.

- Based on Reno's propriety Electro-Chemical bond system which utilizes a nano fluid electrolyte for ultimate performance.
- Extremely small pore size of bond prevents any entry into castable by metal or fluxes.
- Rapid dry out capability while still retaining very low porosity.
- Excellent material for applications in aluminum furnace belly band, troughs, ladles and other areas both below and above the metal line.
- Excellent resistance to alkali vapors.
- Displays excellent non-wetting by aluminum alloys.
- Excellent abrasion resistance.

Service Temperature: 2800°F
Electrolyte Type: E11
Addition Quantity: 4.5-5.2% (wt.)
Wt. Required for Estimating: 167 lb/ft^3
Storage Life: 6 months

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al_2O_3	SiO_2	ZrO_2	SiC	Fe_2O_3	Others
52	32	6-7	8-9	0.8	2.0

TYPICAL PHYSICAL PROPERTIES

Prefire Temperature (°F)	Modulus of Rupture (psi)	Cold Crushing Strength (psi)	Density (pcf)	Porosity (%)	Linear Change (%)	Permeability (mDarcy)	Thermal K (Btu/in/ft^2/°F)	Surface Area (m2/g)
300	715	3,330	167.0	11.0	-0.10	3.1	14.3	3.36
750	867	3,207	165.7	13.3	0.04	4.9	12.2	3.34
1500	2,113	9,129	166.7	13.4	0.15	3.8	11.1	1.89
2000	4,625	15,002	168.2	12.7	-0.30	3.6	10.6	0.32
2500	4,771	15,015	164.8	12.5	-0.33	4.5	10.2	0.76
2650	2,228	14,021	167.0	12.1	-0.15	6.0	10.0	0.43

Thermal Expansion Coefficient: 2.52E-6 in/in/°F (ASTM C832)
Thermal Shock Loss (after 2000°F):   -3.1% MOR Loss (ASTM C-1171)

Hot MOR at 2500°F: 1,657 psi (ASTM C583)

Abrasion Loss After 1500°F: 5.1 cc (ASTM C704)
Abrasion Loss After 2500°F: 3.7 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.)
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