

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 vapor penetration.
- Rapid dry out capability while still retaining very low porosity.
- Excellent resistance to abrasion and alkali vapors.

Service Temperature: 2800°F Electrolyte Type: E11

Addition Quantity: 4.75-6.0% (wt.)

Wt. Required for Estimating: 167 lb/ft³ 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

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Prefire	Modulus	Cold	Density	Porosity	Linear	Permeability	Thermal K	Surface	
Temperature	of	Crushing	(pcf)	(%)	Change	(mDarcy)	(Btu/in/ft²/ºF)	Area	
(°F)	Rupture	Strength			(%)			(m2/g)	
	(psi)	(psi)							
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 1500°F: 1,798 psi (ASTM C583) Hot MOR at 2500°F: 1,976 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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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.