



RENO REFRACTORIES, INC

ElectroPump™ 1122-SiC

TECHNICAL DATA SHEET

ElectroPump™ 1122-SiC is a fused alumina castable with silicon-carbide additives. This product is designed for pump/casting into forms.

- Based on Reno's proprietary Electro-Chemical bond system featuring an electrolyte for maximum performance.
- A premium product with excellent resistance to molten iron and slag, thermal shock and oxidation.
- Recommended for use in blast furnace troughs, skimmer-blocks, cupola wells, cupola skimmer blocks, troughs, and tap-hole blocks.
- Excellent refractory for holding and pressure-pour furnaces, receiver and discharge spouts, and ductile treatment ladles.
- The lining forms a non-wetting surface that prevents slag buildup.

Service Temperature: 3000°F
 Electrolyte Type: E11
 Addition Quantity: 4.5- 5.0% by weight
 Wt. Required for Estimating: 180 lb/ft³
 Storage Life: 6 months

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al ₂ O ₃	SiO ₂	TiO ₂	SiC + C	Other
67	7.5	1.6	22	1.9

TYPICAL PHYSICAL PROPERTIES

Prefire Temperature (°F)	Modulus of Rupture (psi)	Cold Crushing Strength (psi)	Density (pcf)	Porosity (%)	Linear Change (%)	Permeability (mDarcys)	Thermal K (Btu/ft2in/hr)	Surface Area (m2/g)
250	705	2,588	183	10.3	0.11	1.3	16.8	2.87
750	1,298	4,302	182	14.1	0.11	1.0	17.9	2.94
1000	1,610	6,367	183	15.0	-0.15	1.1	17.1	1.38
1500	2,352	13,025	180	14.4	-0.11	0.9	18.3	1.24
2000	3,575	14,400	183	13.4	0.04	4.3	18.4	0.17
2500*	2,500	15,270	182	12.3	0.26	5.0	19.2	0.13
2800*	2,575	14,085	181	11.9	0.11	6.1	19.5	0.09

* reducing atmosphere

Thermal Expansion Coefficient 2.87E-6 in/in/F (ASTMC832)
 Thermal Shock Loss(after2000°F) 16.2% MOR Loss(ASTM C1171)

Hot MOR at 2500°F: 1207 psi (ASTM C583 – Orton)
 Hot MOR at 2750°F: 384 psi (ASTM C583 – Orton)

Abrasion Loss After 1500°F: 2.1cc (ASTM C704)
 Abrasion Loss After 2500°F: 4.5cc (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.)
 19-106B Revised BP 5/16/2021 pin#195030

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.