



TECHNICAL DATA SHEET

ElectroCast 1110 SIC is a fused Alumina based castable with silicon-carbide additives. This product is designed for vibration 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: 3.75 - 4.25 % by weight
Wt. Required for Estimating: 196 lb/ft³
Storage Life: 6 months

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al2O3 80 SiO2 8 TiO2 1.7 SiC + C 10

TYPICAL PHYSICAL PROPERTIES

Table with 9 columns: Prefire Temperature (°F), Modulus of Rupture (psi), Cold Crushing Strength (psi), Density (pcf), Porosity (%), Linear Change (%), Permeability (mDarcys), Thermal k (Btu/ft²/in/hr), Surface Area (m²/g). Rows include temperatures from 250 to 2800°F.

\* reducing atmosphere

Thermal Expansion Coefficient: 3.11E-6in/in/°F (ASTM C832)
Thermal Shock Loss (after 2000°F): 36.22% MOR loss (ASTM C-1171)

Hot MOR at 2500°F: 1178 psi (ASTM C583 - Orton)
Hot MOR at 2750°F: 980 psi (ASTM C583 - Orton)

Abrasion Loss After 1500°F: 4.4 cc (ASTM C704)
Abrasion Loss After 2500°F: 6.8 cc (ASTM C704)
Abrasion Loss After 2800°F: 4.5 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.)
19-106A Revised BP 5/16/2021 pin#193920

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.