ElectroShot™ 11-808

TECHNICAL DATA SHEET

ElectroShot[™] **11-808** is a high alumina, bauxite based castable with silicon carbide additions. This product is designed to be installed by the Shotcrete process.

- Based on Reno's proprietary Electro Chemical bond system featuring E11, a nano-fluid electrolyte for ultimate performance.
- Rapid dry out capability while still having low porosity.
- Micro porosity of bond phase has greatly reduced reactivity to furnace and ladle vapors.
- High density, low porosity, high strengths and excellent resistance to metals, alkali, slags, thermal shock, abrasion and oxidation.
- Excellent resistance to iron, slag, thermal shock, abrasion and oxidation.
- Recommended for repair of blast furnace troughs, skimmer-blocks, tilting runners, and torpedo ladles.
- Also is an excellent refractory for repair of Cupola wells, troughs, and ladles, receiver and discharge spouts.
- Excellent corrosion resistance for any application where slag wear is a problem.

Service Temperature: 3000°F Electrolyte Type: E11

Addition Quantity: 4.5-5.1% by weight

Wt. required for Estimating: 179 lb/ft³ Storage Life: 6 months

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

 AI_2O_3 SiO_2 TiO_2 CaO SiC 81 7-8 2-3 0.2 8

TYPICAL PHYSICAL PROPERTIES * reducing atmosphere

Prefire	Modulus of	Cold Crushing	Density	Porosity	Linear	Permeability	Thermal	Surface Area
Temperature	Rupture	Strength	(pcf)	(%)	Change	(mDarcys)	Conductivity	(m ² /g)
(°F)	(psi)	(psi)			(%)	0.3 Green	(Btu/ft²/in/hr)	
250	595	2,527	174.1	11.9	0.04	11.8	15.1	2.45
750	843	1,806	172.3	17.5	-0.11	9.6	14.6	2.74
1000	1,001	5,012	170.2	18.4	-0.04	12.6	14.3	2.87
1500	2,647	8,939	178.9	16.6	0.00	12.1	14.1	2.25
2000	4,190	14,131	181.0	12.5	-0.35	14.8	13.9	1.92
2500	3,190	12,022	176.3	13.8	-0.14	25.9	14.1	0.83
2800 [*]	2,112	13,354	175.5	14.8	0.32	142.1	14.2	0.37

Thermal Expansion Coefficient: 2.86E-6 in/in/°F (ASTM C832)
Thermal Shock Loss (after 2000°F): 18.65% Loss (ASTM C-1171)

Hot MOR at 2500°F: 1126 psi (ASTM C583) Hot MOR at 2750°F: 478 psi (ASTM C583)

Abrasion Loss After 1500°F: 3.0 cc (ASTM C704) Abrasion Loss After 2500°F: 3.3 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.) 19-011C Revised BP 5/16/2021 pin#193540

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.