

ElectroShot[™] 25 SiC

TECHNICAL DATA SHEET

ElectroShot[™] **25 SIC** is a fused alumina, silicon-carbide fortified, no-cement castable designed to be installed by pump/cast or the shotcrete process.

- Based on Reno's propriety Electro Chemical bond system featuring an electrolyte for ultimate performance.
- Rapid dry out capability while still retaining very low porosity.
- Excellent material for applications in cement plant cyclones, ducts, coolers, and offtakes.
- Excellent resistance to alkalai vapors, sulfur compounds, and chlorides.
- Excellent refractory for large scale installations.
- Low permeability to reduce vapor penetration into the refractory structure.
- The low porosity and small pore sizes creates dry hot face surfaces which greatly reduce dust buildup in ducts.

Service Temperature: 3000°F
Storage Life: 6 months
Electrolyte Type: E11

Electrolyte Type:

Addition Quantity: 4.2-4.8% (wt.)

Wt. Required for Estimating: 180 pcf

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al_2O_3	SiO_2	TiO ₂	SiC + C
67	6.5	1.2	25

TYPICAL PHYSICAL PROPERTIES *reducing atmosphere

Prefire	Modulus of	Cold Crushing	Density	Porosity	Linear	Permeability	Thermal K
Temperature	Rupture	Strength	(pcf)	(%)	Change	(mdarcys)	(Btu/in/ft ² /hr)
(°F)	(psi)	(psi)	· · · · · · · · · · · · · · · · · · ·	, ,	(%)	, , ,	,
250	828	1,997	181.5	14.8	-0.11	1.4	16.2
750	915	2,571	178.9	15.6	0.18	5.4	18.8
1000	937	4,496	178.0	15.6	-0.07	7.2	19.9
1500	1,514	9,525	179.5	15.5	0.00	5.7	21.1
2000	3,074	14,187	178.2	12.4	-0.04	20.2	21.4
2200	3,091	10,815	182.1	12.6	-0.07	27.9	21.6
2500 [*]	2,095	9,527	179.7	13.9	-0.36	24.5	21.9
2800 [*]	1,894	12,280	179.1	13.6	-0.11	32.6	22.4

Thermal Expansion Coefficient: 2.88E-6 in/in/°F (ASTM C832) Thermal Shock Loss (after 2000°F): -16.8% MOR (ASTM C-1171)

Abrasion Loss After 1500°F: 3.2 cc (ASTM C704) Abrasion Loss After 2500°F: 6.0 cc (ASTM C704)

19-022C Revised BP 5/15/2021 pin#196040

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.