



RENO REFRACTORIES, INC

RENO CAST 40 TSR

TECHNICAL DATA SHEET

RENO CAST 40 TSR is a thermal shock resistant low cement castable refractory with good strengths. It is low in iron for reducing conditions and low thermal conductivity to make it semi-insulating.

RENO CAST 40 TSR is recommended for use in kiln furniture, preheater lids or other applications where excellent thermal shock resistance is required. It withstands mechanical abuse better than fiber insulation, which can be further increased by adding stainless steel needles.

SERVICE TEMPERATURE: 2500°F
MATERIAL REQUIRED FOR ESTIMATING: 136 lbs./cu. ft.
WATER ADDITION: 7 – 7.5 %

TYPICAL CHEMICAL ANALYSIS (includes binder) (Calcined Basis)

Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	TiO ₂	MgO	CaO	P ₂ O ₅	Alkalis
41	54	0.7	<1.5	0.1	2.5	0.2	0.3

TYPICAL PHYSICAL PROPERTIES (Gunned)

Pre-fired to °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear Change %	Porosity %	“K” Factor Btu-in/hr-ft ² °F
250	1650	9700	Nil	10.2	
750	1310	9825	0.1	10.1	
1,500	1080	9275	-0.9	16.1	
1,800	875	8600	-0.2	16.3	
2,000	870	7700	-0.2	16.3	
2,200	780	7800	-0.1	16.9	
2,500	550	7900	-1.0	14.1	

Thermal Shock % Retained (at 2000°F): 89
Abrasion Loss % (at 1500 °F): 18.2

PACKAGING: 55 lb. Bags, 72 per Pallet (3960 lbs.)
1000 lb. Bags, 3 per Pallet (3000 lbs.)

140500 – 2/22/24

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.

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