



RENO REFRACTORIES, INC

RENO CAST SP 92

TECHNICAL DATA SHEET

RENO CAST SP 92 is a volume stable, low cement castable containing high alumina-magnesia spinel mineralogy. It was designed to be installed by vibra-casting or pumping. High refractoriness, excellent hot strength and resistance to molten steel, and iron are a few of its unique characteristics.

RENO CAST SP 92 is recommended for applications in steel ladles, well blocks, impact pads, electric furnace runners, and many other dynamic molten metal contact areas. Excellent choice for reheat furnace hearths.

SERVICE TEMPERATURE:	3000°F
MATERIAL REQUIRED FOR ESTIMATING:	188 lbs. pcf
WATER ADDITION:	3.75 – 5.0 % by weight

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	MgO
90 – 92	<0.1	<0.1	4.0 – 4.5

TYPICAL PHYSICAL PROPERTIES (Cast at 4.75%)

Prefired to °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear Change %	Thermal Conductivity
250	950 – 1,400	6,900 – 7,500	Nil	37.6
1,500	850 – 1,030	6,200 – 6,700	0.0	24.1
2,000	1,550 – 1,800	8,930 – 10,200	0.0	22.0
2,500	2,775 – 3,200	16,000 – 18,300	0.1	23.2
2,800	2,840 – 3,300	14,000 – 23,667	0.2	25.1

ABRASION LOSS After 2500°F: <4 cc

HOT MOR @ 2500°F (Orton): 4,370 psi

HOT MOR @ 2700°F (Orton): 3,065 psi

POROSITY after 2500°F: 15.5%

COEFFICIENT OF THERMAL EXPANSION: 5.13E⁻⁶ in/in/°F

PACKAGING: 55 lb. Bags, 72 per Pallet (3,960 lbs.)

162500 – 7/12/24

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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