



RENO REFRACTORIES, INC

## Reno ASAP Cast 52 AR LC

### TECHNICAL DATA SHEET

**Reno ASAP Cast 52 AR LC** is a high alumina low cement castable that contains silicon carbide and zircon. This product has low porosity, high strengths and excellent resistance to alkali, thermal shock abrasion and oxidation.

- Can be installed by vibration casting, pumping and shotcrete.
- Designed for an accelerated dryout schedule.
- Recommended for use in Cement applications including: Stage 3 & 4 Cyclones, Calciner, Feed Hood, Firing Hood, Tertiary Duct, & Cooler Vent Duct.

Service Temperature: 2800°F / 1538°C  
Liquid Type: Water  
Addition Quantity: 6.75 – 7.75%

Wt. Required for Estimating: 150 lb./ft<sup>3</sup>  
Storage Life: 6 months  
Shotcrete Binder: Sodium Nitrite

#### TYPICAL CHEMICAL ANALYSIS (% Calcined Basis)

Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	SiC	Zr <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	CaO	Alkalies	Other
48-53	28-33	7-8	2-4	<1	<1.5	2-3	<0.5	1-3

#### TYPICAL COLD PHYSICAL PROPERTIES

Prefired to °F	Cold Modulus of Rupture (psi)	Cold Crushing Strength (psi)	Density (pcf)	Porosity (%)	Linear Change (%)	Abrasion Loss (cc)	Thermal Shock Loss (%)
750	2,222	8,960	153	14.4	-0.07		
1500	1,902	9,917	149	17.6	-0.17	< 5.8	
2000	2,588	11,261	150	18.8	-0.46		-22.92
2500	2,381	11,607	142	19.0	1.67	< 9.1	
2800	3,714	12,019	151	15.6	0.74		

#### TYPICAL HOT PHYSICAL PROPERTIES

Prefired to °F	Hot Modulus of Rupture (psi)	Thermal Conductivity (BTU/ft <sup>2</sup> /hr./in/°F)	Thermal Expansion (%) (oxidizing)
750		11.8	0.15
1500	2,866	11.2	0.22
2000		10.9	0.40
2500	186	10.7	2.10
2750		10.6	1.95

Coefficient of Thermal Expansion:  $2.35 \times 10^{-6}$  in/in/°F

Standard Cure Out Schedule: Schedule E

22-138 D

PIN#167801 12/15/2023

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.

**Reno Refractories, PO Box 201, Morris, Alabama 35116**  
**205.647.0240 | Toll Free 1.800.741.7366**