



PRODUCT DATA

Brand Name: UNICRETE 94

Description: UNICRETE 94 IS A HIGH ALUMINA CASTABLE HYDRAULICALLY BONDED WITH HIGH PURITY HIGH STRENGTH CEMENT. UNICRETE 94 IS DESIGNED FOR MAXIMUM RESISTANCE TO CARBON DEPOSITION, ABRASION AND EROSION TO 3300 °F. The properties of low cement castables are sensitive to the amount of mixing water used during casting. The best physical properties are achieved when mixing water is kept to a minimum, the material is mixed thoroughly and as much vibration as possible is used when casting.

Physical properties shown are average values of samples taken under controlled conditions
ASTM test methods used where applicable

Maximum Service Temperature: 3300°F (1816°C)

Typical Water Required for Mixing (by weight) :
Casting 7.0 - 8.0%

| | <u>Casting Data</u> | |
|--|---------------------|---------------------------|
| <u>Bulk Density (pcf)</u> | | |
| After 230°F (110°C) | 175 | (2.80 g/cm ³) |
| After 1500°F (815°C) | 172 | (2.76 g/cm ³) |
| <u>Cold Crushing Strength (psi)</u> | | |
| After 230°F (110°C) | 10500 | (735 kg/cm ²) |
| After 1500°F (815°C) | 12000 | (840 kg/cm ²) |
| <u>Modulus of Rupture (psi)</u> | | |
| After 230°F (110°C) | 1600 | (112 kg/cm ²) |
| After 1500°F (815°C) | 1200 | (84 kg/cm ²) |
| <u>Permanent Linear Change (%)</u> | | |
| After 230°F (110°C) | 0.0 | |
| After 1500°F (815°C) | -0.1 | |

Typical Chemical Analysis (%)

(Calcined Basis)

| | |
|---|------|
| Alumina (Al ₂ O ₃) | 96.2 |
| Iron Oxide (Fe ₂ O ₃) | 0.1 |
| Lime (CaO) | 3.6 |
| Alkalies (Na ₂ O+K ₂ O) | 0.2 |

Standard Packaging: 70 lb bag. Bulk packaging available.

Brand Code: 3156

The properties shown on this data sheet represent typical average results using standard ASTM test methods (unless otherwise noted) conducted under controlled condition (using standard rectangular shapes), and should not be considered to be guaranteed specifications. Properties are subject to normal manufacturing statistical standard deviation ranges, and Resco Products, Inc. reserves the right to modify the properties and specifications at any time without prior notice.

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