



# PRODUCT DATA

**Brand Name:** RESCOCAST 3

**Description:** RESCOCAST 3 is a high performance insulating castable designed for a variety of applications. Its density is approximately 60 lb/ft<sup>3</sup> and offers superior strength characteristics, as well as a high strength-to-insulation ratio. This material can be used as an original lining material or as a replacement for refractory ceramic fiber. RESCOCAST 3 can be installed by either gunning or casting methods. For pumpcasting or shotcreting applications, RESCOCAST 3 PC is recommended.

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

**Maximum Service Temperature: 2400°F (1316°C)**

**Typical Water Required for Mixing (by weight) :**

Casting ..... 38%  
Pre dampening for Gunning ..... 8.3 - 10.4%

|  | Casting Data                          |                           | Gunning Data                          |                           |
|--|---------------------------------------|---------------------------|---------------------------------------|---------------------------|
|  |                                       |                           |                                       |                           |
| <b>Bulk Density (pcf)</b>              |                                       |                           |                                       |                           |
| After 1500°F (815°C)                   | 60                                    | (0.96 g/cm <sup>3</sup> ) | 75                                    | (1.20 g/cm <sup>3</sup> ) |
| <b>Cold Crushing Strength (psi)</b>    |                                       |                           |                                       |                           |
| After 1500°F (815°C)                   | 650                                   | (46 kg/cm <sup>2</sup> )  | 750                                   | (53 kg/cm <sup>2</sup> )  |
| <b>Thermal Conductivity (K Factor)</b> |                                       |                           |                                       |                           |
| Mean Temperature                       | <u>BTU/ft<sup>2</sup>/hr./°F/inch</u> | <u>W/mK</u>               | <u>BTU/ft<sup>2</sup>/hr./°F/inch</u> | <u>W/mK</u>               |
| 500°F (260°C)                          | 2.3                                   | 0.33                      | 2.8                                   | 0.41                      |
| 1000°F (540°C)                         | 1.8                                   | 0.26                      | 2.3                                   | 0.33                      |
| 1500°F (815°C)                         | 2.1                                   | 0.30                      | 2.6                                   | 0.38                      |
| <b>Permanent Linear Change (%)</b>     |                                       |                           |                                       |                           |
| Green to 1500°F (815°C)                | -0.5 to 0.0                           |                           | -0.5 to 0.0                           |                           |
| 230°C (110°C) to 1500°F (815°C)        | -0.4 to 0.0                           |                           | -0.4 to 0.0                           |                           |

**Apparent Porosity (%)**

After 1000°F (540°C) 55.0 ---

**Typical Chemical Analysis (%)**

(Calcined Basis)

|   |      |
|---|------|
| Alumina (Al <sub>2</sub> O <sub>3</sub> ) .....     | 30.5 |
| Silica (SiO <sub>2</sub> ) .....                    | 48.8 |
| Lime (CaO) .....                                    | 14.1 |
| Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> ) .....  | 2.7  |
| Titania (TiO <sub>2</sub> ) .....                   | 1.0  |
| Magnesia (MgO) .....                                | 0.8  |
| Alkalies (Na <sub>2</sub> O+K <sub>2</sub> O) ..... | 2.1  |

**Standard Packaging:** 50 lb bag. 50 bags per pallet. Bulk packaging available.

Brand Code: 0315

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.

RESCO PRODUCTS disclaims any express or implied warranties based on this sheet.

03/14/17 is the date that this data sheet was updated. Check with your RESCO sales representative or RESCO website to determine you have the current sheet.

One Robinson Plaza - Suite 300, 6600 Steubenville Pike, Pittsburgh, PA, 15205 Phone: 888-283-5505