

## GENERAL DUTY CASTABLES

PRODUCT DATA

## **RESCOCAST 17GP**

RESCOCAST 17GP is a gunning grade monolithic designed to have minimum shrinkage values and better volume stability. It is used where high strength and erosion resistance are required, such as in burner blocks for circulating fluid bed units. Rescocast 17GP has been formulated for gunite application with minimum rebound losses and uniform flow through the nozzle. Data shown are average results of tests following the guidelines set forth in ASTM C-903 70 "Preparing Refractory Concrete Specimens by Cold Gunning".

| MAXIMUM SERVICE TEMPERATURE (M.S.T.) |              |                     |        | 1650°c |                    |  |  |  |
|--------------------------------------|--------------|---------------------|--------|--------|--------------------|--|--|--|
| BULK DENSITY                         |              |                     |        |        |                    |  |  |  |
| @ 927°C                              | 135 - 140    | LBS/FT <sup>3</sup> | 2160 - | 2240   | KG/M <sup>3</sup>  |  |  |  |
| COLD CRUSHING STRENGTH               |              |                     |        |        |                    |  |  |  |
| @ <b>540°</b> C                      | 6000 - 10000 | P.S.I.              | 420 -  | 700    | KG/CM <sup>2</sup> |  |  |  |
| @ <b>927°</b> C                      | 6000 - 10000 | P.S.I.              | 420 -  | 700    | KG/CM <sup>2</sup> |  |  |  |
| @ 1095°C                             | 4500 - 7000  | P.S.I.              | 315 -  | 350    | KG/CM <sup>2</sup> |  |  |  |
| COLD MODULUS OF RUPTURE              |              |                     |        |        |                    |  |  |  |
| @ <b>540°</b> C                      | 800 - 1200   | P.S.I.              | 56 -   | 84     | KG/CM <sup>2</sup> |  |  |  |
| @ <b>927°</b> C                      | 800 - 1200   | P.S.I.              | 56 -   | 84     | KG/CM <sup>2</sup> |  |  |  |
| @ 1095°C                             | 700 - 1100   | P.S.I.              | 49 -   | 77     | KG/CM <sup>2</sup> |  |  |  |
| PERMANENT LINEAR CHANGE              |              |                     |        |        |                    |  |  |  |
| @ Green to 927°C                     | :            | 0.00                | TO - 0 | .30 %  |                    |  |  |  |
| @ Green to 1095°                     |              | 0.00                | TO - 0 | .30 %  |                    |  |  |  |
|                                      |              |                     |        |        |                    |  |  |  |

EROSION LOSS ASTM C-704 LESS THAN 22.0 CC

## CONDUCTIVITY OR "K" FACTOR

|  |                 | BTU/ft2/Hr/°F/in          | <u>W/mK</u> |
|--|-----------------|---------------------------|-------------|
|  | @ <b>540°</b> C | 7.8                       | 1.12        |
|  | @ <b>815°</b> C | 8.1                       | 1.17        |
|  | @ 1095°C        | 8.2                       | 1.18        |
|  |                 | TYPICAL CHEMICAL ANALYSIS | S (%)       |

| $AL_2O_3$ | SiO <sub>2</sub> | $Fe_2O_3$ | CaO | MgO | Alk | $\mathtt{TiO}_2$ |
|-----------|------------------|-----------|-----|-----|-----|------------------|
| 50.7      | 43.0             | 0.8       | 3.9 | 0.1 | 0.2 | 1.3              |

The properties shown on this data sheet represent typical average results generated using standard ASTM test methods (unless otherwise noted) conducted under controlled conditions 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 expressed or implied warranties based on this sheet. 01/08/13 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

