

## RESCOCAST 1870LI

RESCOCAST 1870LI IS A VERY HIGH PURITY, LOW IRON, LOW SILICA HYDRAULIC SETTING CASTABLE FOR HIGH TEMPERATURE APPLICATIONS. LOW IRON AND LOW SILICA CONTENTS OF LESS THAN 0.1 TO 0.2 PERCENT MAKES RESCOCAST 1870LI AN IDEAL CHOICE FOR REDUCING ATMOSPHERES SUCH AS HYDROGEN AND / OR CARBON MONOXIDE AND PROVIDES EXCELLENT RESISTANCE TO SLAGS AND HIGH TEMPERATURE CORROSIVE ATMOSPHERES. THIS IS A CASTING GRADE PRODUCT WHICH HAS AN EXTENDED WORKING TIME IDEAL FOR VIBRATE CASTING.

**MAXIMUM SERVICE TEMPERATURE (M.S.T.)** (1870°C)

**BULK DENSITY**

@ 110°C	166 - 172	LBS/FT <sup>3</sup>	2659 - 2755	KG/M <sup>3</sup>
@ 815°C	161 - 167	LBS/FT <sup>3</sup>	2579 - 2675	KG/M <sup>3</sup>

**COLD CRUSHING STRENGTH**

@ 540°C	9000 - 12000	P.S.I.	630 - 845	KG/CM <sup>2</sup>
@ 815°C	8000 - 12000	P.S.I.	560 - 845	KG/CM <sup>2</sup>
@ 1510°C	9000 - 14000	P.S.I.	630 - 985	KG/CM <sup>2</sup>

**COLD MODULUS OF RUPTURE**

@ 540°C	1200 - 1800	P.S.I.	86 - 125	KG/CM <sup>2</sup>
@ 815°C	1200 - 1800	P.S.I.	86 - 125	KG/CM <sup>2</sup>
@ 1510°C	1800 - 2200	P.S.I.	125 - 155	KG/CM <sup>2</sup>

**PERMANENT LINEAR CHANGE**

@ 815°C	- 0.00 TO - 0.30 %
@ 1510°C	- 0.90 TO - 1.50 %

**EROSION LOSS (ASTM C-704)** LESS THAN 12.0 CC

**CONDUCTIVITY OR "K" FACTOR**

<u>MEAN TEMP</u>	<u>W/mK</u>
@ 540°C	1.56
@ 815°C	1.41
@ 1095°C	1.40

**TYPICAL CHEMICAL ANALYSIS (%)**

AL <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	CaO	MgO	AlK
93.9	0.1	0.1	5.6	0.1	0.2

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