



# PRODUCT DATA

**Brand Name:** R-MAX C Z TL0796

**Description:** R-MAX C with Zircon is a high performance castable designed to provide maximum abrasion resistance and excellent strengths throughout all operating temperatures. R-MAX C can be installed by vibration casting methods, to maximize properties, or by pumpcasting methods. This product has been enhanced with a Zircon addition. The following data are based on vibration cast samples.

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

**Maximum Service Temperature: 3200°F (1760°C)**

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

Vibration Cast ..... 4.3%

<u>Bulk Density (pcf)</u>	<u>Vibration Cast Data</u>	
	After 220°F (105°C)	167
After 1500°F (815°C)	164	(2.62 g/cm <sup>3</sup> )

<u>Cold Crushing Strength (psi)</u>		
After 1500°F (815°C)	19000	(1330 kg/cm <sup>2</sup> )

<u>Thermal Conductivity (K Factor)</u>	<u>BTU/ft<sup>2</sup>/hr./°F/inch</u>	<u>W/mK</u>
1000°F (538°C)	16.0	2.31
1500°F (815°C)	16.2	2.34
2000°F (1093°C)	16.5	2.38

<u>Permanent Linear Change (%)</u>		
Green to 220°F (105°C)	-0.1 to 0.0	
After 1500°F (815°C)	-0.3 to 0.0	

<u>Abrasion Loss (using ASTM C-704 Method)</u>		
After 1500°F (815°C)	4 cc (max)	

<u>Typical Chemical Analysis (%)</u>		
<u>(Calcined Basis)</u>		
Alumina (Al <sub>2</sub> O <sub>3</sub> ) .....	68.0	
Silica (SiO <sub>2</sub> ) .....	21.5	
Lime (CaO) .....	1.9	
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> ) .....	1.0	
Titania (TiO <sub>2</sub> ) .....	2.2	
Zirconia (ZrO <sub>2</sub> ) .....	5.0	
Alkalies (Na <sub>2</sub> O+K <sub>2</sub> O) .....	0.2	

**Standard Packaging:** 55 lb bag. 72 bags per pallet. Bulk packaging available.

Brand Code: 8638

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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