



# PRODUCT DATA

**Brand Name:** R-MAX 85Z

**Description:** R-MAX 85Z is a Abrasion-Resistant 85% Alumina Castable that contains Zircon for severe wear applications in the cement industry. This castable features very high abrasion resistance with good flow under vibration. This castable should be installed by vibration casting only.

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 ..... 4.5%

<u>Bulk Density (pcf)</u>	<u>Vibration Cast Data</u>	
After 220°F (105°C)	178	(2.85 g/cm <sup>3</sup> )
After 1500°F (815°C)	175	(2.80 g/cm <sup>3</sup> )

<u>Cold Crushing Strength (psi)</u>		
After 1500°F (815°C)	15000	(1050 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)	17.0	2.46
1500°F (815°C)	17.2	2.49
2000°F (1093°C)	17.5	2.53

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

<u>Abrasion Loss (using ASTM C-704 Method)</u>	
After 1500°F (815°C)	3 cc

<u>Typical Chemical Analysis (%)</u>	
(Calcined Basis)	
Alumina (Al <sub>2</sub> O <sub>3</sub> ) .....	80.8
Silica (SiO <sub>2</sub> ) .....	10.2
Lime (CaO) .....	2.8
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> ) .....	0.7
Titania (TiO <sub>2</sub> ) .....	1.9
Magnesia (MgO) .....	0.2
Zirconia (ZrO <sub>2</sub> ) .....	3.3
Alkalies (Na <sub>2</sub> O+K <sub>2</sub> O) .....	0.1

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

Brand Code: 1794

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.

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

03/07/17 is the date that this data sheet was updated. Check with your RESKO sales representative or RESKO website to determine you have the current sheet.