



# PRODUCT DATA

**Brand Name:**

## RESCORAM 10CR

**Description:** RESCORAM 10 CR is a high alumina, phosphate-bonded plastic with 10% chromic oxide that is used throughout the metals producing industries. Its chemical bond develops high strength at lower temperatures. This property makes it ideal for application where there is insufficient heat to develop the ceramic bond required in heat-setting plastics.

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

**Maximum Service Temperature: 3100°F (1704°C)**

<u>Bulk Density (pcf)</u>	<u>Ramming Data</u>	
As Received	203	(3.25 g/cm <sup>3</sup> )

<u>Modulus of Rupture (psi)</u>		
After 1500°F (815°C)	2000	(140 kg/cm <sup>2</sup> )
After 2500°F (1370°C)	1900	(134 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>
Mean Temperature		
1000°F (540°C)	18.0	2.59
1500°F (815°C)	18.9	2.72
2000°F (1093°C)	20.9	3.01

<u>Permanent Linear Change (%)</u>	
220°F (540°C) to 1500°F (815°C)	-0.2
220°F (540°C) to 2500°F (1370°C)	-0.3

<u>Abrasion Loss (using ASTM C-704 Method)</u>	
After 1500°F (815°C)	Less than 10 cc

### Typical Chemical Analysis (%)

(Calcined Basis)

Alumina (Al <sub>2</sub> O <sub>3</sub> ) .....	83.3
Silica (SiO <sub>2</sub> ) .....	2.6
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> ) .....	0.1
Lime (CaO) .....	0.1
Magnesia (MgO) .....	0.2
Chromic Oxide (Cr <sub>2</sub> O <sub>3</sub> ) .....	10.5
Phosphorus Pentoxide (P <sub>2</sub> O <sub>5</sub> ) .....	3.0
Alkalies (Na <sub>2</sub> O+K <sub>2</sub> O) .....	0.2

**Standard Packaging:** 55 lb carton. 64 cartons per pallet

Brand Code: 0553

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.

03/24/17 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.