



# Plastics and Ramming Mixes

## Product Data

### RESCORAM 90

**RESCORAM 90** is a high alumina, phosphate-bonded plastic material that is used throughout the metals, power, cement, and lime 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.

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

**Bulk Density:** (As installed) 192 lbs/ft<sup>3</sup> (3072 kg/m<sup>3</sup>)

**Modulus of Rupture:**

1500°F ( 815°C)	2400 psi (168 kg/cm <sup>2</sup> )
2500°F (1370°C)	3540 psi (248 kg/cm <sup>2</sup> )
2910°F (1600°C)	3800 psi (266 kg/cm <sup>2</sup> )

**Drying Shrinkage (green - 220°F):** 1.1 %

**Permanent Linear Change (%):**

(220°F to fired)	
1500°F ( 815°C)	- 0.02
2500°F (1370°C)	- 0.60
2910°F (1600°C)	-0.72

**Conductivity or "K" Factor:**

Mean Temp.	BTU/ft <sup>2</sup> /Hr/°F/in	W/mK
1000°F ( 540°C)	13.5	1.47
1500°F ( 815°C)	12.8	1.51
2000°F (1095°C)	13.3	1.54

**Erosion Loss:** ASTM C-704 Less than 5 cc  
(Typical: 3.0 - 4.5 cc)

**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	Alkalies	P <sub>2</sub> O <sub>5</sub>
93.2	2.6	0.2	0.1	0.1	0.3	3.5

The properties shown on this data sheet represent typical average results generated 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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