



# Product Data

10/05: 0899

## GREFCOTE® 70 AL PLUS

Description: 70% Al<sub>2</sub>O<sub>3</sub> low cement gunning mix for aluminum applications that can be installed cold or hot.

Uses: Gunned repairs in aluminum furnaces and ladles.

Chemical Analysis: (Approximate)  
(Calcined Basis)

Alumina	(Al <sub>2</sub> O <sub>3</sub> )	67.8%
Silica	(SiO <sub>2</sub> )	22.7
Lime	(CaO)	2.5
Iron Oxide	(Fe <sub>2</sub> O <sub>3</sub> )	1.3
Titania	(TiO <sub>2</sub> )	2.6
Magnesia	(MgO)	0.2
Alkalies	(Na <sub>2</sub> O+K <sub>2</sub> O)	0.5
Other Oxides		2.4

<u>Physical Properties: (Typical)</u>	<u>English Units</u>	<u>Gunned</u>	<u>SI Units</u>
Maximum Service Temperature	2500°F		1371°C
Material Required for Gunning (Net) (No Allowance for Rebound Loss)	<u>lb/ft<sup>3</sup></u> 126		<u>g/cm<sup>3</sup></u> 2.02
Approximate Water for Predampening		1.9%	
Approximate Rebound		13%	
Bulk Density			
After 230°F (110°C)	138		2.21
After 1500°F (816°C)	126		2.02
Permanent Linear Change			
After 1500°F (816°C)		-0.2%	
After 2500°F (1371°F)		-1.8%	
Modulus of Rupture	<u>lb/in<sup>2</sup></u>		<u>MPa</u>
After 230°F (110°C)	250		1.7
After 1500°F (816°C)	220		1.5
Cold Crushing Strength			
After 230°F (110°C)	630		4.3
After 1500°F (816°C)	960		6.6

The data given above are based on averages of the results on samples selected from initial or limited plant production. Variation from the above data may occur in individual tests and in large scale plant production. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.