



Product Data

3/06: 5870
Plus: 5874

KAST-O-LITE® 30 LI

Classification: 3000°F, Insulating Castable

Maximum Temperature	3000°F	1650°C
Material Required	90 lb/ft ³	1.44 g/cm ³
Bulk Density	<u>lb/ft³</u>	<u>g/cm³</u>
After 220°F (105°C)	95	1.52
After 1500°F (815°C)	90	1.44
Water Required		<u>Approximately</u>
Weight % Dry Solids		18%
Per 100 Pounds (45.4 kg)	2 1/8 gal. (U.S.)	8.4 liters
Permanent Linear Change		
After 220°F (105°C)		Nil
After 1500°F (815°C)		-0.2
After 2000°F (1095°C)		-0.2
After 2500°F (1370°C)		+2.0
After 2910°F (1599°C)		+1.0
Modulus of Rupture	<u>lb/in²</u>	<u>MPa</u>
After 220°F (105°C)	600	4.1
After 1500°F (815°C)	300	2.1
After 2000°F (1095°C)	300	2.1
After 2500°F (1370°C)	900	6.2
After 2910°F (1599°C)	800	5.5
Cold Crushing Strength		
After 220°F (105°C)	2500	17.2
After 1500°F (815°C)	2000	13.8
After 2000°F (1095°C)	1300	9.0
After 2500°F (1370°C)	2000	13.8
After 2910°F (1599°C)	1800	12.4
Particle Size		
Retained on 10 Mesh Screen		Less Than 5%

(Continued)



Product Data

KAST-O-LITE® 30 LI (Continued)

Thermal Conductivity At A Mean Temperature of	<u>Btu-in/hr.ft².°F</u>	<u>W/m.°C</u>
400°F (205°C)	6.1	0.88
800°F (425°C)	3.8	0.55
1200°F (650°C)	4.0	0.58
1600°F (870°C)	4.2	0.61
2000°F (1095°C)	4.5	0.65

Chemical Analysis - Calcined Basis

Silica	(SiO ₂)	35.3%
Alumina	(Al ₂ O ₃)	56.6
Iron Oxide	(Fe ₂ O ₃)	0.9
Lime	(CaO)	5.0
Magnesia	(MgO)	0.3
Titania	(TiO ₂)	1.3
Alkalies	(Na ₂ O + K ₂ O)	0.6

Description: KAST-O-LITE 30 LI is a high alumina, lightweight, 3000°F maximum service temperature, insulating castable. It exhibits moderate density, excellent strengths, low iron, and low thermal conductivity. Typical applications are aluminum furnace stacks, aluminum holding furnace doors, reheat furnace discharge doors, carbon black backup linings, air heaters, and reheat furnace backup linings.

KAST-O-LITE 30 LI Plus is the fast fire version of KAST-O-LITE 30 LI.

The test data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.

3/6/06 Dev.