



USA:(561) 330-9300

www.thermbond.com
STELLAR MATERIALS INCORPORATED

EU:+31 (10) 2460264

ENGLISH

Revision 07/08/2002 (Check www.thermbond.com for updates)

FORMULA 16-G

Thermbond Refractories use the patented Stellar Binder System™ for easy and accurate mixing, controlled setting, fast dry-out and heat up, thermal shock resistance and other unique properties. Thermbond chemically bonds to existing fired refractories. CHARACTERISTICS: - High Purity - Medium Weight - Non-Wetting - Fast Setting - Fast Curing -

PACKAGING		
Bag Weight*	43 lbs	19.5 kg
Jug Weight*	8 lbs	3.6 kg
Drum Weight*	400 lbs	181.4 kg
Unit Weight*	51 lbs	23.0 kg
Yield / Unit*	0.42 ft3	0.012 m3
Units / Ton*	39.53 short	43.57 metric
Board Feet / Unit*	5.1 bd ft	
Wet to Dry Ratio*	17.7% - 19.4%	
Liquid Activator	FORMULA	
Bags Per Pallet	48	
Drums Per Dry Pallet	1 (plus predampening jugs)*	

APPLICATION***	
Data based on	Gunning
Alternative Method***	Casting

BULK DENSITY**		
As Placed	120 lbs/ft3	1922 kg/m3
After 1500F (816C)	110 lbs/ft3	1762 kg/m3

MAXIMUM RECOMMENDED SERVICE TEMP**		
Hot Face	2200 F	1204 C

MOLTEN METAL CONTACT	
- Aluminum - Zinc -	

COMPRESSIVE STRENGTH**			
1500F (816C)	2500 psi	176 kg/cm2	17 N/mm2
2500F (1371C)	3000 psi	211 kg/cm2	21 N/mm2
2600F (1427C)	3500 psi	246 kg/cm2	24 N/mm2

PERMANENT LINEAR CHANGE**	
1500F (816C)	-0.30%
2500F (1371C)	-0.50%
2600F (1427C)	-0.70%

TYPICAL CHEMICAL ANALYSIS (After 1500F (816C))**	
Al2O3	8.48%
SiO2	80.48%
Fe2O3	0.18%
P2O5	6.76%
Other	4.11%
Total	100.00%

THERMAL CONDUCTIVITY**		
1000F (538C)	3.3 Btu-in/hr-ft2-F	0.48 W/m K
1500F (816C)	3.6 Btu-in/hr-ft2-F	0.52 W/m K
2000F (1093C)	4.0 Btu-in/hr-ft2-F	0.58 W/m K
2500F (1371C)	4.0 Btu-in/hr-ft2-F	0.58 W/m K

COLD MODULUS OF RUPTURE**			
1500F (816C)	650 psi	46 kg/cm2	4 N/mm2
2500F (1371C)	750 psi	53 kg/cm2	5 N/mm2
2600F (1427C)	850 psi	60 kg/cm2	6 N/mm2

HOT MODULUS OF RUPTURE**			
1500F (816C)	1500 psi	105 kg/cm2	10 N/mm2

*Measures are approximate and may vary. For mixing partial units, contact Stellar Materials for specific wet-to-dry ratios. See Installation Guide for more detailed information.

**Test data shown are based on averages subject to normal variation on individual tests, and therefore should not be assumed to be maximum or minimum specifications.

Due to the unique nature of the Stellar binder system, test procedures vary slightly from ASTM. Documentation of these variations is available upon request.

***Application by alternative method may produce somewhat different results.