THERMBOND® REFRACTORIES
www.thermbond.com
USA:(561) 330-9300 STELLAR MATERIALS INCORPORATED EU:+31 (10) 2460264

TECHNICAL DATA SHEET

ENGLISH

Revision 07/16/2008 (Check www.thermbond.com for updates)

FORMULA 6-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: - Alumina - Silica - Mullite - Dense - Non-Wetting - Fast Setting - Fast Curing

PACKAGING		
Bag Weight*	60 lbs	27.2 kg
Jug Weight*	8 lbs	3.6 kg
Drum Weight*	400 lbs	181.4 kg
Unit Weight*	68 lbs	30.7 kg
Yield / Unit*	0.48 ft3	0.014 m3
Units / Ton*	29.59 short	32.61 metric
Board Feet / Unit*	5.8 bd ft	
Wet to Dry Ratio*	12.7% - 13.9%	
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	140 lbs/ft3	2243 kg/m3
After 1500F (816C)	130 lbs/ft3	2082 kg/m3

MAXIMUM RECOMMENDED SERVICE TEMP**		
Hot Face	3000 F	1649 C

MOLTEN METAL CONTACT
- Aluminum - Zinc - Iron

COMPRESSIVE STRENGTH**			
1500F (816C)	2500 psi	176 kg/cm2	17 N/mm2
2000F (1093C)	3000 psi	211 kg/cm2	21 N/mm2
2500F (1371C)	4500 psi	316 kg/cm2	31 N/mm2

PERMANENT LINEAR CHANGE**	
1500F (816C)	-0.10%
2000F (1093C)	-0.30%
2800F (1538C)	0.50%

TYPICAL CHEMICAL ANALYSIS (After 1500F (816C))**	
Al2O3	61.38%
SiO2	27.04%
Fe2O3	1.07%
P2O5	5.24%
Other	5.28%
Total	100.00%

THERMAL CONDUCTIVITY**		
600F (316C)	9.0 Btu-in/hr-ft2-F	1.30 W/m K
1200F (649C)	9.2 Btu-in/hr-ft2-F	1.33 W/m K
1800F (982C)	9.5 Btu-in/hr-ft2-F	1.37 W/m K
2400F (1316C)	10.0 Btu-in/hr-ft2-F	1.44 W/m K

COLD MODULUS OF RUPTURE**			
1500F (816C)	600 psi	42 kg/cm2	4 N/mm2
2000F (1093C)	800 psi	56 kg/cm2	6 N/mm2
2500F (1371C)	1300 psi	91 kg/cm2	9 N/mm2

HOT MODULUS OF RUPTURE**			
1500F (816C)	1850 psi	130 kg/cm2	13 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.