



TECHNICAL DATA SHEET

For our detailed Installation Guide and more information, visit us at www.thermbond.com

ENGLISH

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FORMULA 6-AG

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 - Abrasion Resistant - Non-Wetting - Fast Setting - Fast Curing

PACKAGING		
Bag Weight*	63 lbs	28.6 kg
Jug Weight*	8 lbs	3.6 kg
Drum Weight*	400 lbs	181.4 kg
Unit Weight*	71 lbs	32.0 kg
Yield / Unit*	0.50 ft3	0.014 m3
Units / Ton*	28.33 short	31.23 metric
Board Feet / Unit*	6.1 bd ft	
Wet to Dry Ratio*	12.1% - 13.3%	
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)	3000 psi	211 kg/cm2	21 N/mm2
2000F (1093C)	4000 psi	281 kg/cm2	28 N/mm2
2500F (1371C)	8000 psi	562 kg/cm2	55 N/mm2

PERMANENT LINEAR CHANGE**	
1500F (816C)	-0.20%
2000F (1093C)	-0.50%
2500F (1371C)	-1.40%

TYPICAL CHEMICAL ANALYSIS (After 1500F (816C))**	
Al2O3	63.63%
SiO2	25.39%
Fe2O3	0.96%
P2O5	4.99%
Other	5.04%
Total	100.00%

THERMAL CONDUCTIVITY**		
600F (316C)	9.0 Btu-in/hr-ft2-F	1.30 W/m K
1000F (538C)	10.0 Btu-in/hr-ft2-F	1.44 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

COLD MODULUS OF RUPTURE**			
1500F (816C)	900 psi	63 kg/cm2	6 N/mm2
2000F (1093C)	800 psi	56 kg/cm2	6 N/mm2
2500F (1371C)	1800 psi	127 kg/cm2	12 N/mm2

HOT MODULUS OF RUPTURE**			
1500F (816C)	2000 psi	141 kg/cm2	14 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.

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