



USA:(561) 330-9300

www.thermbond.com
STELLAR MATERIALS INCORPORATED

EU:+31 (10) 2460264

ENGLISH

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FORMULA 6-A

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		
Unit Equivalent	Bags: 1	Jugs: 1
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*	0.44 ft3	0.012 m3
Units / Ton*	28.33 short	31.23 metric
Board Feet / Unit*	5.3 bd ft	
Wet to Dry Ratio*	12.1% - 13.3%	
Liquid Activator	FORMULA	
Bags Per Pallet	48	
Drums Per Dry Pallet	1	

APPLICATION***	
Data based on	Casting
Alternative Method***	Hand Packing

BULK DENSITY**		
As Placed	160 lbs/ft3	2563 kg/m3
After 1500F (816C)	150 lbs/ft3	2403 kg/m3

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

ABRASION RESISTANCE** (ASTM C-704)	
After 1500F (816C)	<15 cc loss

MOLTEN METAL CONTACT
- Aluminum - Zinc - Iron -

COMPRESSIVE STRENGTH**			
1500F (816C)	5000 psi	352 kg/cm2	34 N/mm2
2000F (1093C)	7000 psi	492 kg/cm2	48 N/mm2
2500F (1371C)	10500 psi	738 kg/cm2	72 N/mm2

PERMANENT LINEAR CHANGE**	
1500F (816C)	-0.18%
2000F (1093C)	-0.57%
2500F (1371C)	-1.45%

TYPICAL CHEMICAL ANALYSIS (After 1500F (816C))**	
Al2O3	64.70%
SiO2	24.94%
Fe2O3	0.89%
P2O5	5.05%
Other	4.42%
Total	100.00%

THERMAL CONDUCTIVITY**		
600F (316C)	10.3 Btu-in/hr-ft2-F	1.48 W/m K
1200F (649C)	9.9 Btu-in/hr-ft2-F	1.43 W/m K
1800F (982C)	10.0 Btu-in/hr-ft2-F	1.44 W/m K
2400F (1316C)	10.6 Btu-in/hr-ft2-F	1.52 W/m K

COLD MODULUS OF RUPTURE**			
1500F (816C)	1450 psi	102 kg/cm2	10 N/mm2
2000F (1093C)	1600 psi	112 kg/cm2	11 N/mm2
2500F (1371C)	2350 psi	165 kg/cm2	16 N/mm2

HOT MODULUS OF RUPTURE**			
1500F (816C)	2500 psi	176 kg/cm2	17 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.