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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 ft ³ | 0.014 m ³ |
| 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/ft ³ | 2243 kg/m ³ |
| After 1500F (816C) | 130 lbs/ft ³ | 2082 kg/m ³ |

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

| ABRASION RESISTANCE** (ASTM C-704) | |
|------------------------------------|-------------|
| After 1500F (816C) | <20 cc loss |

| MOLTEN METAL CONTACT | |
|--------------------------|--|
| - Aluminum - Zinc - Iron | |

| COMPRESSIVE STRENGTH** | | | |
|------------------------|----------|------------------------|----------------------|
| 1500F (816C) | 3000 psi | 211 kg/cm ² | 21 N/mm ² |
| 2000F (1093C) | 4000 psi | 281 kg/cm ² | 28 N/mm ² |
| 2500F (1371C) | 8000 psi | 562 kg/cm ² | 55 N/mm ² |

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

| TYPICAL CHEMICAL ANALYSIS (After 1500F (816C))** | |
|--------------------------------------------------|---------|
| Al ₂ O ₃ | 63.63% |
| SiO ₂ | 25.39% |
| Fe ₂ O ₃ | 0.96% |
| P ₂ O ₅ | 4.99% |
| Other | 5.04% |
| Total | 100.00% |

| THERMAL CONDUCTIVITY** | | |
|------------------------|-----------------------------------|------------|
| 600F (316C) | 9.0 Btu-in/hr-ft ² -F | 1.30 W/m K |
| 1200F (649C) | 9.2 Btu-in/hr-ft ² -F | 1.33 W/m K |
| 1800F (982C) | 9.5 Btu-in/hr-ft ² -F | 1.37 W/m K |
| 2400F (1316C) | 10.0 Btu-in/hr-ft ² -F | 1.44 W/m K |

| COLD MODULUS OF RUPTURE** | | | |
|---------------------------|----------|------------------------|----------------------|
| 1500F (816C) | 900 psi | 63 kg/cm ² | 6 N/mm ² |
| 2000F (1093C) | 800 psi | 56 kg/cm ² | 6 N/mm ² |
| 2500F (1371C) | 1800 psi | 127 kg/cm ² | 12 N/mm ² |

| HOT MODULUS OF RUPTURE** | | | |
|--------------------------|----------|------------------------|----------------------|
| 1500F (816C) | 2000 psi | 141 kg/cm ² | 14 N/mm ² |

*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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