

## **HT Cast**

## **Product Data Sheet**

### **Product Description**

Conventional dense, low iron, 60% alumina castable with good working properties and excellent thermal shock for temperatures up to 1700°C (3090°F). Typical applications are heat containment or burner blocks.

Properties	HT Cast
Region of Manufacture	Europe
Bond Type	Hydraulic
Method of application	Cast
Maximum Service Temperature, °C (°F)	1700 (3090)
Water addition, % by weight	11 - 13
Maximum grain size, mm	6
Packaging in bags, kg (lb)	25 (55)

Whilst the values and application information in this datasheet are typical, they are given for guidance only. The values and the information given are subject to normal manufacturing variation and may be subject to change without notice. Morgan Advanced Materials – Thermal Ceramics makes no guarantees and gives no warranties about the suitability of a product and you should seek advice to confirm the product's suitability for use with Morgan Advanced Materials - Thermal Ceramics.

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Density, kg/m³ (pcf), ASTM C134	
oven dried, 110°C (230°F)	2210 (137.9)
Cold crushing strength, MPa (psi), ASTM C133	
oven dried, 110°C (230°F)	22.5 (3262)
after 5 hours firing, 815°C (1500°F)	11 (1595)
after 5 hours firing, 1000°C (1832°F)	13.5 (1957)
Permanent linear change, %, ASTM C113	
after 5 hours, 815°C (1500°F)	-0.1
after 5 hours, 1000°C (1832°F)	-0.2
after 5 hours, 1600°C (2912°F)	+/-0.5
Thermal conductivity, W/m•K (BTU•in./hr•ft²•°F), ASTM C201/417	
600°C (1112°F)	0.86 (5.97)
Chemical composition, %	
Alumina, Al <sub>2</sub> O <sub>3</sub>	66
Silica, SiO <sub>2</sub>	28
Ferric oxide, Fe <sub>2</sub> O <sub>3</sub>	1.1
Calcium oxide, CaO	3

#### **Instruction for Use**

Highest strength is obtained with monolithic refractory by using the least amount of clean mixing water. This will allow thorough working of material into place by vibrating or rodding. A mechanical mixer is required for proper placement (paddle-type mortar mixers are best suited). After achieving a ball-in-hand consistency, mix for >4 minutes. Place material within 30 minutes after mixing.

#### Storage and Shelf Life

- Should be stored in dry conditions, unopened packaging on pallets. Do not store on ground. Keep out of rain and damp conditions.
- Shelf life is of twelve months with original packaging, double shrink film and dehydrating agent provided if the monolithic is stored under these recommended conditions.

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