Plascast® HT

Product Data Sheet

Product Description

A 1700°C (3090°F) superior quality plastic supplied dry and installed as a castable with high installation rates, very low drying shrinkage, excellent strength and thermal shock resistance. Plascast HT possesses excellent thermal shock resistance throughout its temperature range.

Properties	Plascast HT
Region of Manufacture	Europe
Bond Type	Ceramo-Hydraulic
Method of application	Cast
Maximum Service Temperature, °C (°F)	1700 (3090)
Estimated weight of dry material/ m^3 of construction, kg (lb)	2300 (144)
Water addition, % by weight	8.5-9.5
Maximum grain size, mm	6
Packaging in bags, kg (lb)	25 (55)

The product(s) represented are intended for industrial refractory applications. The values and application information in this datasheet 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.

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Density, kg/m^3 (pcf), ASTM C134	
oven dried, 110°C (230°F)	2280 (142.3)
Cold crushing strength, MPa (psi), ASTM C133	
oven dried, 110°C (230°F)	8 (1160)
Permanent linear change, %, ASTM C113	
after 5 hours, 1000°C (1832°F)	-0.2
after 5 hours, 1300°C (2372°F)	-0.3
after 5 hours, 1600°C (3000°F)	+/-1.0
Thermal conductivity, W/m•K (BTU•in./hr•ft²•°F), ASTM C201/417	
600°C (1112°F)	1.2 (8.33)
Chemical composition, %	
Alumina, Al_2O_3	64
Silica, SiO_2	33
Ferric oxide, Fe_2O_3	1.2

Instruction for Use

Ensure that the temperature of the dry material and the water are such as to give a final mix within 16°C to 21°C (61°F to 69.8°F). For mechanical mixing add the Plascast into the mixer. Add the correct quantity of water and mix for a minimum of 4 minutes.

Work the mixed material thoroughly into place, using vibration to give the mix mobility and to eliminate air. For in-situ casting and heavy preformed sections, use poker vibrators of about 31.75mm-57.15mm (1.25" - 2.25") diameter.

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 six months with original packaging, double shrink film and dehydrating agent provided if the monolithic is stored under these recommended conditions.

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