

HT Cast



Product Description

A 1700°C low iron 60% alumina castable with good working properties and excellent thermal shock resistance.

Features

Conventional dense, general purpose, thermal shock resistant castable for temperatures up to 1700°C.

Installation Method

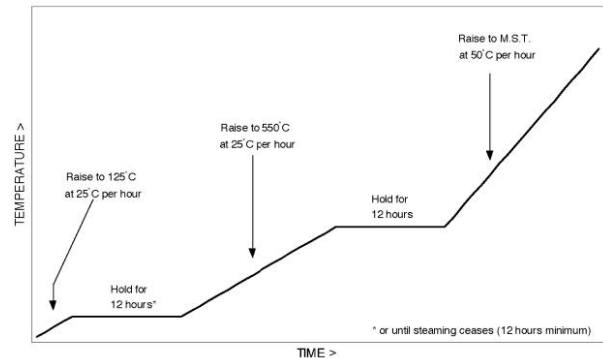
Casting.

Datasheet

Prepared using EN BSI and ISO standard Methods.

Storage

Store bagged monolithics in a dry place, off the ground and, when possible, with the original shrink wrapping intact.



Precautions

Watertight forms must be used when placing material. All porous surfaces that will come in contact with the material must be waterproofed with a suitable coating or membrane. For maximum strength, cure 24 hours in a damp condition before initial heat-up. Keep freshly placed monolithic warm during cold weather, ideally between 21°C to 27°C. New monolithic installations must be heated slowly the first time.

Applications

- Heat containment
- Burner Blocks

Instructions 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.

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CHARACTERISTICS	
Bond Type	Hydraulic
Raw Material Base	Calcined Chamotte/Bauxite
Maximum Grain Size (mm)	6
Maximum Service Temperature (°C)	1700
Bulk Density Dried to 110°C (kg/m ³)	2210
Net Material Required (kg/m ³)	2130

PHYSICAL PROPERTIES		
Test Temperature (°C)	Cold Crushing Strength (N/mm ²)	Permanent Linear Change (%)
110	17	0 to -0.2
815	11	-0.1
1000	11	-0.2
1700	60	+/-0.5

TYPICAL CHEMICAL ANALYSIS (%)	
Al ₂ O ₃	66
SiO ₂	28
Fe ₂ O ₃	1.1
TiO ₂	2.2
CaO	3
MgO	0.2
Na ₂ O + K ₂ O	0.2

THERMAL CONDUCTIVITY		
W/mK		
@ mean temp		
	200°C	
	400°C	
	600°C	0.86
	800°C	
	1000°C	
	1200°C	

MODULUS OF RUPTURE (N/mm ²)	
110°C	N/A
815°C	N/A
ABRASION RESISTANCE ASTM C704 (cm ³)	
815°C	N/A
PALLET SIZE	
kg	1200

WATER ADDITION	
% by weight	11-13
Volume per Bag (l)	2.75-3.25
Bag Weight (kg)	25

The values given herein are typical average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Therefore the data contained herein should not be used for specification purposes. Check with your Thermal Ceramics office to obtain current information or a Compliance Data Sheet where guaranteed property specifications are required. Before using these materials, it is strongly recommended that the installer consults Thermal Ceramics manual "storage and installation manual" copies of which are obtainable from Thermal Ceramics offices or distributors.

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