

Data sheet

# Alumor SH

ENGLISH

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## Description

A general purpose castable containing a non-wetting additive for aluminium contact resistance which can be installed by casting, gunning and trowelling.

## Features

- Conventional dense, general purpose castable for temperatures up to 1350°C. Can be cast, gunned or troweled.
- Non-wetting for aluminium backup linings

## Installation method

Casting.

## Datasheet

Prepared using EN BSI and ISO standard Methods.

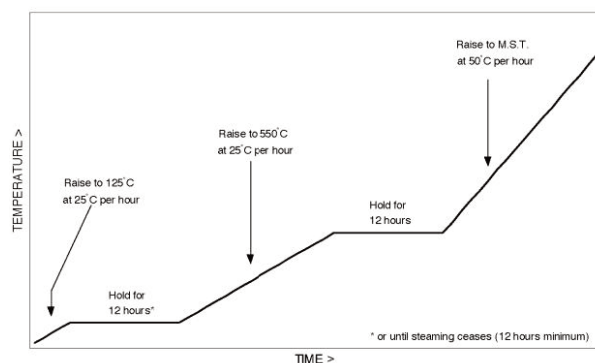
## Storage

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.



## Typical applications

- Heat containment applications up to 1350°C.
- Aluminium sub-hearths and flues.

## Instructions for Use

Highest strength is obtained with castable refractory by using the least amount of clean mixing water that will allow thorough working of material into place by vibrating.

A mechanical mixer is required for proper placement (paddle type mortar mixers are best suited).

After adding the recommended water mix for at least 4 minutes, place the material within 20 minutes after mixing.



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CHARACTERISTICS	
Bond Type	Hydraulic
Raw Material Base	Aluminosilicate
Maximum Grain Size (mm)	6
Maximum Service Temperature (°C)	1350
Bulk Density Dried to 110°C (kg/m <sup>3</sup> )	2125
Net Material Required (kg/m <sup>3</sup> )	2110

PHYSICAL PROPERTIES		
Test Temperature (°C)	Cold Crushing Strength (N/mm <sup>2</sup> )	Permanent Linear Change
110	25	0 to -0.2
815	25	-0.2
1000	24	-0.25
1350	20	+/- 0.5

TYPICAL CHEMICAL ANALYSIS (%)	
Al <sub>2</sub> O <sub>3</sub>	50
SiO <sub>2</sub>	31
Fe <sub>2</sub> O <sub>3</sub>	1.5
TiO <sub>2</sub>	2.7
CaO	10.5
Na <sub>2</sub> O + K <sub>2</sub> O	0.4

THERMAL CONDUCTIVITY		
W/mK		
@ mean temp		
200°C		
400°C		
600°C	0.79	
800°C		
1000°C		
1200°C		

MODULUS OF RUPTURE (N/mm <sup>2</sup> )	
110°C	N/A
815°C	N/A

WATER ADDITION	
% by weight	13-14
Volume per Bag (l)	3.25-3.5
Bag Weight (kg)	25

ABRASION RESISTANCE ASTM C704 (cm <sup>3</sup> )	
815°C	N/A

PALLET SIZE	
kg	1200

## Contact

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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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