

Data sheet

# Alpatch

ENGLISH

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## Description

**Alpatch is a high alumina repair material installed by hand or grouting. It has excellent resistance to molten aluminium and is designed for repairing cracks and worn surfaces of refractories in furnace hearths, ramps, sills and ladles. It must be mixed in a small paddle mixer.**

## Features

- Alpatch is specifically formulated with low drying shrinkage, good workability and excellent resistance molten aluminium and corundum attack.

## Installation method

Trowelling.

## 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

It may be necessary to dampen the area to be filled to ensure that the materials workability is maintained and the material can be worked deep into the cracks.

## Typical applications

- A repair material for filling of cracks in existing aluminium furnace linings.

## Instructions for Use

Mix in a paddle mixer to the desired consistency for trowelling into cracks.



Data sheet  
**Alpatch**

CHARACTERISTICS	
Bond Type	Hydraulic
Raw Material Base	Bauxite
Maximum Grain Size (mm)	1
Maximum Service Temperature (°C)	1400
Bulk Density Dried to 110°C (kg/m <sup>3</sup> )	
Net Material Required (kg/m <sup>3</sup> )	

PHYSICAL PROPERTIES		
Test Temperature (°C)	Cold Crushing Strength (N/mm <sup>2</sup> )	Permanent Linear Change (%)
110	N/A	N/A
815	N/A	N/A
1000	N/A	N/A
1400	N/A	N/A

TYPICAL CHEMICAL ANALYSIS (%)	
Al <sub>2</sub> O <sub>3</sub>	77
SiO <sub>2</sub>	13
Fe <sub>2</sub> O <sub>3</sub>	1
TiO <sub>2</sub>	1.9
CaO	1.5
MgO	0.3
Na <sub>2</sub> O + K <sub>2</sub> O	0.1
BaO	10

MODULUS OF RUPTURE (N/mm <sup>2</sup> )	
110°C	N/A
815°C	N/A
ABRASION RESISTANCE ASTM C704 (cm <sup>3</sup> )	
815°C	N/A
PALLET SIZE	
kg	1000

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

WATER ADDITION	
% by weight	8.5
Volume per Bag (l)	2.125
Bag Weight (kg)	25

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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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