

# Alphabond®300

## Hydratable Alumina

### Product Description

- Alphabond®300 is an amorphous alumina, highly reactive in contact with water, forming strong hydraulic bonds.
- Alphabond®300 can be used as a pure alumina binder as well as it can be added to calcium aluminate cement (CAC) bonded castables.
- When used in cement castables, it accelerates the cement setting and it improves the rheology, resulting in an overall robust castable performance.
- When used as a pure binder, calcia-free alumina castables can be produced with a high refractoriness. It is also useful in other applications where calcia is critical.
- It is additive-free, setting and rheology properties can be controlled with additives known in the market, such as dispersing aluminas.
- In building chemistry “flash” alumina Alphabond®300 is used as an activator.

Chemical Composition	Unit	Typical	Min.	Max.
Al <sub>2</sub> O <sub>3</sub> *	[%]	91	88	
CaO	[%]	0.04		0.1
Na <sub>2</sub> O	[%]	0.4		0.5
SiO <sub>2</sub>	[%]	0.01		0.3
MOI (% loss 25 - 250 ° C)	[%]	1.7		4.1
LOI (% loss 250 - 1100 ° C)	[%]	6.5		7.0
Particle Size Distribution		Typical	Min.	Max.
Particle Size D90	[µm]	18		30
Particle Size D50	[µm]	6	4	8

\* Al<sub>2</sub>O<sub>3</sub> by difference = [100 % - (sum of impurities) - (LOI) - (MOI)]

Chemical analysis is done by ICP and particle size distribution is tested by laser granulometry.

The typical properties are based upon the actual averages from production data.

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### Standard Packaging and Shelf Life

Packaging	25kg PB Paper bags	12.5kg PB Plastic bags	900kg / Sling Bins
Country or Region / Shelf life	12 months	24 months	24 months
China		x	x
Europe		x	x
India		x	x
Japan & South Korea	x		x
North America	x		x
South America	x		x
South East Asia		x	x

### Pallet Sizes

- 40 x 12.5kg PB
- 76 x 12.5kg PB
- 40 x 25kg PB
- 900kg SB DS

Alphabond®300 is hygroscopic and must be handled with care. When not in use, the product should be stored in closed packaging in cool, dry conditions. Experiences have shown that even after longer storage time the properties are not impaired.

Contact for sales, technical information and application assistance

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