



Alphabond 300

Hydratable Alumina

Product Properties

- 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		Typical	min.	max.
Al₂O₃ *	[%]	91	88	
CaO	[%]	0.04		0.1
Na₂O	[%]	0.4		0.5
SiO₂	[%]	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.
d90	[µm]	18		30
d50	[µm]	6	4	8

* Al₂O₃ 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

- 25 kg bags
- 2000 lbs / 907 kg sling bags

Shelf life

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. Under normal circumstances, a shelf life of 12 months should be expected.

Experiences have shown that even after longer storage time the properties are not impaired.



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