

Morbond™ AL

Product Data Sheet

Product Description

Morbond AL is a two component system that forms a rapid setting, easily placed castable on mixing, which can be brought quickly into service. It is a bauxite based composition specifically developed for aluminium contact applications, exhibiting excellent resistance to corundum growth and metal penetration. A 2 pack system phosphate bonded material offering excellent thermal shock resistance and aluminium contact/ corundum resistance.

Properties	Morbond AL
Region of Manufacture	Europe
Bond Type	Chemical
Method of application	Cast
Maximum Service Temperature, °C (°F)	1450
Estimated weight of dry material/ m³ of construction, kg (lb)	2650
Water addition, % by weight	Accelerator
Maximum grain size, mm	3
Packaging in bags, kg (lb)	25 (55)

Whilst the values and application information in this datasheet are typical, they are given for guidance only. The values and the information given are subject to normal manufacturing variation and may be subject to change without notice. Morgan Advanced Materials – Thermal Ceramics makes no guarantees and gives no warranties about the suitability of a product and you should seek advice to confirm the product's suitability for use with Morgan Advanced Materials - Thermal Ceramics.

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Density, kg/m³ (pcf), BS EN ISO 1927		
oven dried, 110°C (230°F)	2650 (165.4)	
Cold crushing strength, MPa (psi), BS EN ISO 1927		
oven dried, 110°C (230°F)	49 (7105)	
after 5 hours firing, 1000°C (1832°F)	36 (5220)	
Permanent linear change, %, BS EN ISO 1927		
after 5 hours, 815°C (1500°F)	-0.1	
after 5 hours, 1000°C (1832°F)	-0.1	
after 5 hours, 1450°C (2642°F)	-0.1	
Thermal conductivity, W/m•K (BTU•in./hr•ft²•°F), BS EN ISO 1927		
600°C (1112°F)	2.42 (1679)	
Chemical composition, %		
Alumina, Al ₂ O ₃	87	
Silica, SiO ₂	3	
Ferric oxide, Fe ₂ O ₃	0.6	
Calcium oxide, CaO	1.6	

Instruction for Use

Morbond AL is a 2 pack system - a bag of dry material and bottle of accelerator. The powder should be added to the liquid and mixed quickly. There will be an exothermic reaction and the mixed material should be placed in 3 minutes.

Storage and Shelf Life

- Should be stored in dry conditions, unopened packaging on pallets. Do not store on ground. Keep out of rain and damp conditions.
- Shelf life is of twelve months with original packaging, double shrink film and dehydrating agent provided if the monolithic is stored under these recommended conditions.

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