

Product Description

A 1500°C (2730°F) medium alumina, medium cement castable for general applications. General low cement applications where medium strength and good thermal shock resistance is required.

Properties	Vibrotek 54C
Region of Manufacture	Europe
Bond Type	Hydraulic
Method of application	Cast
Maximum Service Temperature, °C (°F)	1500 (2730)
Estimated weight of dry material/ m ³ of construction, kg (lb)	2347 (146.5)
Water addition, % by weight	7.5-9
Maximum grain size, mm	6
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.

Vibrotek[®] 54C

Product Data Sheet



Density, kg/m ³ (pcf), ASTM C134	
oven dried, 110°C (230°F)	2250 (140.4)
Cold crushing strength, MPa (psi), ASTM C133	
oven dried, 110°C (230°F)	90 (13050)
after 5 hours, 1000°C (1832°F)	50 (7250)
Permanent linear change, %, ASTM C113	
after 5 hours, 1000°C (1832°F)	-0.3
after 5 hours, 1300°C (2370°F)	0.8
Thermal conductivity, W/m•K (BTU•in./hr•ft ² •°F), ASTM C201/417	
600°C (1112°F)	1.5 (10.41)
Chemical composition, %	
Alumina, Al ₂ O ₃	60
Silica, SiO ₂	31
Ferric oxide, Fe ₂ O ₃	1.0
Calcium oxide, CaO	4.0

Instruction 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. For maximum strength cure 24 hours in a damp condition before initial heat-up. New castable installation must be heated slowly the first time.

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.

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.