

Ds kerabrade d

Kerabrade D

Kerabrade D is a bauxite based abrasion resistant material. It is expensive and requires very intensive mixing in a planetary (bakery type) mixer. It is a high silica fume vibration castable. It is used mainly for precast shapes, since the dryout is difficult due to the very low porosity and permeability.

Maximum service temperature; 1200°C

Maximum particle size; 3mm

Bulk density after 110°C; 2,75g/cm³

Thermal conductivity at 800°C; 2,0W/mK

Cold Crushing Strength dried 110°C; 130MPa. (Rings like steel)

Chemical analysis; Al₂O₃ 78%
Fe₂O₃ 1,6%
SiO₂ 10%
CaO 7%
MgO 0,5%
Na₂O 0,2%
K₂O 0,1%

Mixing; Add +6% to +7% water and mix for 12 minutes in a planetary mixer. Initially the material will appear bone dry. Puddling technique may be used. Any deviation or short cuts will not achieve high strength. Setting time is 2 to 6 hours.

Drying is very tricky, over 5 days for large castings. Let us do it.

Packaging; 25kg polyethylene bags.

Shelf life; Dodgy, better to use within 2 weeks.

Development no. 72303

Claimer; This data had better be correct, since Dave Onderstall rests his reputation on it.