

GREENLITE® 45-L AL

Product Data

Ref:247/31/10/12

Description: Alumina Insulating Castable.

Features:

- Specifically designed to resist wetting and reaction by aluminium.
- Made with a special lightweight aggregate which not only imparts extraordinary strength, but also features excellent insulating properties.

Uses:

- Ideal for doors, launders, back-up insulation, over the road ladles and any other aluminium applications where it is necessary to minimise heat loss.

Chemical Analysis: Approximate (Calcined Basis)

Silica - SiO ₂	39.3%
Alumina - Al ₂ O ₃	35.9%
Titania - TiO ₂	1.7%
Iron Oxide - Fe ₂ O ₃	5.5%
Lime - CaO	11.8%
Magnesia - MgO	0.5%
Alkalies - Na ₂ O + K ₂ O	0.8%

Physical Properties

Maximum Recommended Temperature	
Aluminium Contact	1095°C
All Other Applications	1370°C
Quantity Required	1140 Kgs/m ³
Water required for mixing per 100 Kgs	22 Litres Approximately
Bulk Density	Kgs/m ³
After Heating at 105°C	1100 - 1360
After Heating at 815°C	1080 - 1180
Modulus of Rupture - ASTM C133 and C 865	MPa
After Heating at 105°C	2.0 - 6.0
After Heating at 815°C	2.0 - 6.0
Cold Crushing Strength - ASTM C133 and C865	MPa
After Heating at 105°C	10.0 - 20.0
After Heating at 815°C	7.0 - 17.0
Permanent Linear Change - ASTM C113 and C865	
After Heating at 815°C	0.1% Shr
After Heating at 1095°C	0.1% Exp
After Heating at 1315°C	0.4% Exp
Thermal Conductivity	W/mK
At 205°C	0.37
At 425°C	0.36
At 595°C	0.36
540°C Cooled from 595°C mean	0.35
425°C Cooled from 595°C mean	0.35
Shelf Life (Under Proper Storage Conditions)	365 days

Note: The test data shown are based on average results of control tests and are subject to normal variation on individual tests. These results cannot be taken as maximum or minimum requirements for specification purposes.

MSDS, Installation Guidelines and Dry Out Schedules are also available.