

ULTRA-GREEN[®] 57A

Product Data

Ref:59/31/10/12

Description: 57% Alumina, Andalusite based dense, ultra low cement castable.

- Features:
- Outstanding thermal shock resistance in applications having extreme cyclic temperature conditions.
 - High hot strength.
 - Low porosity and high density superior or equal to fired brick of similar formulations.

- Uses:
- Incinerators.
 - Calciners.
 - Other areas where extreme cyclic temperature conditions occur.

Chemical Analysis: Approximate (Calcined Basis)

Silica - SiO ₂	40.0%
Alumina - Al ₂ O ₃	58.0%
Titania - TiO ₂	0.3%
Iron Oxide - Fe ₂ O ₃	0.6%
Lime - CaO	1.2%
Magnesia - MgO	0.1%
Alkalies - Na ₂ O + K ₂ O	0.3%

Physical Properties

	Vibration Cast
Maximum Recommended Temperature	1650°C
Quantity Required	2515 Kgs/m ³
Water required for mixing per 100 Kgs	4.5 - 5.5 Litres Approximately
Bulk Density	Kgs/m ³
After Heating at 105°C	2450 - 2650
After Heating at 815°C	2450 - 2650
Modulus of Rupture - ASTM C133 and C865	MPa
After Heating at 105°C	6.0 - 12.0
After Heating at 815°C	6.0 - 12.0
After Heating at 1095°C	6.0 - 12.0
After Heating at 1370°C	6.0 - 11.0
Cold Crushing Strength - ASTM C133 and C865	MPa
After Heating at 105°C	50.0 - 80.0
After Heating at 815°C	60.0 - 90.0
After Heating at 1095°C	60.0 - 90.0
After Heating at 1370°C	60.0 - 85.0
Permanent Linear Change - ASTM C113 and C865	
After Heating at 105°C	<0.05%
After Heating at 815°C	0 - 0.3% Exp
After Heating at 1095°C	0 - 0.5% Exp
After Heating at 1370°C	0 - 1.0% Exp
After Heating at 1480°C	0 - 1.3% Exp
After Heating at 1650°C	0 - 1.5% Exp
Thermal Conductivity	W/mK
At 205°C	1.56
At 425°C	1.64
At 650°C	1.72
At 870°C	1.79
At 1095°C	1.86
At 1315°C	1.92
Shelf Life (Under Proper Storage Conditions)	120 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.