

ULTRA-GREEN[®] 80



Product Data

Ref:60/31/10/12

Description: 80% Alumina ultra low cement castable.

Features: ● High hot strength for resistance to hot load abrasion and hot metal erosion.

Uses: ● Reheat furnace hearths.
● Iron ladles.
● Steel ladles.
● Cyclones.
● Desulphurising lances.
● Electric furnace delta sections.

Chemical Analysis: Approximate (Calcined Basis)

Silica - SiO ₂	13.0%
Alumina - Al ₂ O ₃	82.4%
Titania - TiO ₂	2.4%
Iron Oxide - Fe ₂ O ₃	0.9%
Lime - CaO	1.1%
Magnesia - MgO	0.1%
Alkalies - Na ₂ O + K ₂ O	0.1%

Physical Properties

Maximum Recommended Temperature	Vibration Cast 1760°C
Quantity Required	2800 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	2690 - 2900
After Heating at 815°C	2650 - 2800
Modulus of Rupture - ASTM C133 and C865	MPa
After Heating at 105°C	8.0 - 14.0
After Heating at 815°C	11.0 - 20.0
After Heating at 1095°C	14.0 - 22.0
After Heating at 1370°C	12.0 - 17.0
Cold Crushing Strength - ASTM C133 and C865	MPa
After Heating at 105°C	65.0 - 105.0
After Heating at 815°C	70.0 - 105.0
After Heating at 1095°C	70.0 - 105.0
After Heating at 1370°C	60.0 - 75.0
Permanent Linear Change - ASTM C113 and C865	
After Heating at 105°C	<0.05% Shr
After Heating at 815°C	0.5% Shr - 0.5% Exp
After Heating at 1095°C	0.5% Shr - 0.5% Exp
After Heating at 1370°C	0.5 - 1.5% Exp
After Heating at 1700°C	0.5% Shr - 2.0% Exp
Thermal Conductivity	W/mK
At 205°C	2.06
At 425°C	2.06
At 650°C	2.09
At 870°C	2.14
At 1095°C	2.21
At 1315°C	2.31
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.

