

EXPRESS[®] 30 PLUS

Product Data

Ref:80/02/01/14

Description: Dense, Self-Flowing Refractory Castable

- Features:**
- High density and very good abrasion resistance properties are ideal for hot face lining material.
 - Can also be vibration cast using reduced water levels, providing properties superior to those attained at self-flowing consistency.
- Uses:**
- Fluid catalytic cracking unit (FCCU) transfer lines, cyclones and air heaters.
 - Aluminium casting furnace upper sidewall and roof regions.
 - Precast shapes and burner blocks.
 - Rotary kiln lifter and mixer shapes and rotary kiln feed and discharge hoods.
 - Brass crucible furnace tops, brass reverberatory furnace upper sidewalls and roof regions and vertical case of channel induction furnaces for melting yellow brass.
 - Incinerators, high temperature boiler linings and combustion chambers.

Chemical Analysis: Approximate (Calcined Basis)

Silica - SiO ₂	35.2%
Alumina - Al ₂ O ₃	58.8%
Iron Oxide - Fe ₂ O ₃	0.8%
Lime - CaO	3.1%
Titania - TiO ₂	1.9%
Magnesia - MgO	0.7%
Alkalies - Na ₂ O + K ₂ O	0.2%

Physical Properties

Physical Properties	Self Flowing
Maximum Recommended Temperature	1650°C
Quantity Required	2320 Kgs/m ³
Water required for mixing per 100 Kgs	7.5 - 9.0 Litres Approximately
Bulk Density	Kgs/m ³
After Heating at 105°C	2300 - 2450
After Heating at 815°C	2300 - 2450
Modulus of Rupture - ASTM C133 and C865	MPa
After Heating at 105°C	7.0 - 12.0
After Heating at 815°C	7.0 - 12.0
After Heating at 1095°C	7.0 - 12.0
After Heating at 1370°C	7.0 - 12.0
Hot Modulus of Rupture	MPa
At 1093°C	14.5
At 815°C	6.2
Cold Crushing Strength - ASTM C133 and C865	MPa
After Heating at 105°C	50.0 - 90.0
After Heating at 815°C	55.0 - 83.0
After Heating at 1095°C	50.0 - 90.0
After Heating at 1370°C	50.0 - 90.0
Permanent Linear Change - ASTM C113 and C865	
After Heating at 815°C	0.0 - 0.3% Shr
After Heating at 1095°C	0.0 - 0.4% Shr
After Heating at 1370°C	0.0 - 0.5% Exp
After Heating at 1600°C	0.0 - 0.4% Exp
Abrasion Loss - ASTM C704	cc
After Heating at 815°C	7.0
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.