

PLASTECH[®] 50P

Ref:150/31/10/12

Product Data

Description: 50% alumina, phosphate bonded plastic.

- Features:
- Higher strengths to withstand mechanical abuse than conventional heat set plastics.
 - Better alkali resistance than conventional heat set plastics.
 - Longer shelf life of 6 months results in less waste.
 - Stable workability over time.
 - Excellent pliability enables less time to install.
- Uses:
- Low temperature incinerators.
 - Aluminium furnace upper sidewalls.
 - Steel reheat and heat treating furnaces.
 - Brass and bronze ladle linings.
 - General steel mill and foundry maintenance.

Chemical Analysis: Approximate (Calcined Basis)

Silica - SiO ₂	42.9%
Alumina - Al ₂ O ₃	49.8%
Titania - TiO ₂	1.0%
Iron Oxide - Fe ₂ O ₃	1.0%
Lime - CaO	0.3%
Magnesia - MgO	0.2%
Alkalies - Na ₂ O + K ₂ O	0.4%
Phosphorus Pentoxide - P ₂ O ₅	4.3%

Physical Properties

Maximum Recommended Temperature	1600°C
Quantity Required	2500 Kgs/m ³
Bulk Density	Kgs/m ³
After Heating at 345°C	2260
After Heating at 1400°C	2180
Modulus of Rupture - ASTM C113 and C 865	MPa
After Heating at 345°C	13.8
After Heating at 1400°C	12.4
Hot Modulus of Rupture	
After Heating at 1400°C	5.5
Cold Crushing Strength - ASTM C113 and C865	MPa
After Heating at 345°C	35.2
After Heating at 1400 °C	71.7
Abrasion Loss	cc
After Heating at 815°C	8.0
Permanent Linear Change - ASTM C113 and C865	
After Heating at 345°C	0.7% Shr
After Heating at 1400°C	0.7% Exp
Thermal Conductivity (at the mean temperature of)	W/mK
425°C	0.72
650°C	0.79
870°C	0.91
1095°C	1.07
Shelf Life (Under Proper Storage Conditions)	180 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.