TUFCAST LI

Product Data

Ref:54/31/10/12

Description: Low Iron Castable for use up to 1540°C.

Features:
- Outstanding abrasion resistance, CO resistance and robustness
- Versatile dense medium alumina castable.

Uses:
- Metallurgical and chemical industries.

Chemical Analysis: Approximate (Calcined Basis)	
Silica - SiO_2	43.7%
Alumina - Al_2O_3	46.8%
Titania - TiO_2	1.5%
Iron Oxide - Fe_2O_3	1.3%
Lime - CaO	6.2%
Magnesia - MgO	0.2%
Alkalies - $Na_2O + K_2O$	0.4%

Physical Properties	Vibration Cast
Maximum Recommended Temperature	1540°C
Quantity Required	1990 Kgs/m^3
Water required for mixing per 100 Kgs	13 Litres Approximately
Bulk Density	Kgs/m^3
After Heating at 105°C	1950 - 2150
After Heating at 815°C	1950 - 2030
Modulus of Rupture - ASTM C133 and C865	MPa
After Heating at 105°C	3.0 - 8.0
After Heating at 815°C	1.0 - 4.0
After Heating at 1095°C	1.0 - 4.0
After Heating at 1370°C	1.0 - 4.0
Cold Crushing Strength - ASTM C133 and C865	MPa
After Heating at 105°C	15.0 - 30.0
After Heating at 815°C	15.0 - 20.0
After Heating at 1095°C	10.0 - 15.0
After Heating at 1370°C	10.0 - 15.0
Permanent Linear Change - ASTM C113 and C865	
After Heating at 105°C	<0.1% Shr
After Heating at 815°C	0.1 - 0.3% Shr
After Heating at 1095°C	0.1 - 0.3% Shr
After Heating at 137 °C	0.2 Shr - 0.5% Exp
After Heating at 1600°C	1.0 - 2.0% Exp
Thermal Conductivity	W/mK
At 205°C	0.58
At 425°C	0.6
At 650°C	0.64
At 870°C	0.66
At 1095°C	0.69
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.