# KAST-O-LITE® 23 LI

Product Data

Ref:208/31/10/12

Description: 1260°C Low-Iron Insulating Castable.

Features:
- Contains low iron to resist detrimental reducing furnace conditions.
- Can be placed by casting or gunning.

Uses:
- Flues, stacks and breechings.
- Controlled atmosphere furnaces.
- Petrochemical transfer and riser backup linings.
- Catalytic reforming linings behind stainless steel shrouds.
- Waste heat boilers.

| Chemical Analysis: Approximate (Calcined Basis) | |
|---|---|
| Silica - $SiO_2$ | 54.0% |
| Alumina - $Al_2O_3$ | 33.2% |
| Titania - $TiO_2$ | 0.7% |
| Iron Oxide - $Fe_2O_3$ | 0.7% |
| Lime - CaO | 9.6% |
| Magnesia - MgO | 0.2% |
| Alkalies - $Na_2O + K_2O$ | 1.7% |

| Physical Properties | Conventional Cast |
|---|---|
| Maximum Recommended Temperature | 1260°C |
| Quantity Required | 800 Kgs/$m^3$ |
| Water required for mixing per 100 Kgs | 50 Litres Approximately |
| Bulk Density | Kgs/$m^3$ |
| After Heating at 105°C | 800 - 950 |
| After Heating at 815°C | 800 - 950 |
| Modulus of Rupture - ASTM C133 and C865 | MPa |
| After Heating at 105°C | 0.4 - 2.0 |
| After Heating at 815°C | 0.2 - 1.5 |
| After Heating at 1040°C | 0.2 - 1.5 |
| Cold Crushing Strength - ASTM C133 and C865 | MPa |
| After Heating at 105°C | 1.0 - 3.0 |
| After Heating at 815°C | 1.0 - 3.0 |
| After Heating at 1040°C | 0.5 - 3.0 |
| Permanent Linear Change - ASTM C113 and C865 | |
| After Heating at 105°C | 0.3% Shr |
| After Heating at 815°C | 0.8% Shr |
| After Heating at 1040°C | 1.7% Shr |
| Thermal Conductivity | W/mK |
| At 205°C | 0.24 |
| At 425°C | 0.28 |
| At 650°C | 0.29 |
| At 870°C | 0.29 |
| 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.