

# KAST-O-LITE<sup>®</sup> 20 PLUS

## Product Data

Ref:161/18/03/13

Description: 1095°C Insulating Castable.

- Features:
- High efficiency insulating castable.
  - Usable in direct contact with hot gases under continuous or intermittent operation without loss of thermal efficiency.
  - Extremely resistant to thermal shock and has low thermal conductivity.

- Uses:
- Breechings.
  - Oil stills and heaters.
  - Flue and duct linings.
  - Lightweight panels.
  - Back-up for hearths, car tops and arches.
  - Heat treating, annealing and stress relieving furnaces.

### Chemical Analysis: Approximate (Calcined Basis)

Silica - SiO <sub>2</sub>	31.6%
Alumina - Al <sub>2</sub> O <sub>3</sub>	34.1%
Titania - TiO <sub>2</sub>	1.7%
Iron Oxide - Fe <sub>2</sub> O <sub>3</sub>	3.2%
Lime - CaO	21.2%
Magnesia - MgO	6.5%
Alkalies - Na <sub>2</sub> O + K <sub>2</sub> O	1.7%

### Physical Properties

	Conventional Cast
Maximum Recommended Temperature	1095°C
Quantity Required	500 Kgs/m <sup>3</sup>
Water required for mixing per 100 Kgs	85 - 95 Litres Approximately
Bulk Density	Kgs/m <sup>3</sup>
After Heating at 105°C	510 - 640
After Heating at 815°C	400 - 530
Modulus of Rupture - ASTM C133 and C865	MPa
After Heating at 105°C	0.35 - 2.0
After Heating at 540°C	0.30 - 2.0
After Heating at 815°C	0.35 - 2.0
After Heating at 1040°C	0.30 - 2.0
Cold Crushing Strength - ASTM C133 and C865	MPa
After Heating at 105°C	0.5 - 2.0
After Heating at 540°C	0.5 - 2.0
After Heating at 815°C	0.5 - 2.0
After Heating at 1040°C	0.5 - 2.0
Permanent Linear Change - ASTM C113 and C865	
After Heating at 105°C	0 - 0.6% Shr
After Heating at 540°C	0 - 0.5% Shr
After Heating at 815°C	0 - 1.0% Shr
After Heating at 1040°C	1.0 - 2.0% Shr
Thermal Conductivity	W/mK
At 205°C	0.17
At 425°C	0.19
At 650°C	0.20
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.