

KAST-O-LITE® 19 L PLUS



Product Data

10/11: 5461

Description: 1900°F Insulating Castable

- Features:
- Outstanding low density and very low thermal conductivity.
 - Superior to refractory block insulation because it can conform to a complex shell and fill intricate voids.
- Uses:
- Backup lining behind other refractories
 - Working lining in ductwork for hot gas only.

Chemical Analysis: Approximate (Calcined Basis)

Alumina (Al ₂ O ₃)	31.6%
Silica (SiO ₂)	27.9%
Lime (CaO)	18.6%
Magnesia (MgO)	10.7%
Iron Oxide (Fe ₂ O ₃)	6.9%
Titania (TiO ₂)	1.8%
Alkalies (Na ₂ O+K ₂ O)	2.5%

Physical Data (Typical)	Poured
Maximum Service Temperature	1900°F (1040°C)
Material Required	19 lb/ft ³ (0.30 g/cm ³)
Bulk Density	lb/ft ³ (g/cm ³)
After 220°F (105°C)	26 (0.42)
After 1500°F (816°C)	19 (0.30)
Modulus of Rupture	lb/in. ² (MPa)
After 220°F (105°C)	25 (0.17)
After 1000°F (538°C)	13 (0.09)
After 1500°F (816°C)	20 (0.14)
After 1800°F (982°C)	20 (0.14)
Cold Crushing Strength	lb/in. ² (MPa)
After 220°F (105°C)	45 (0.31)
After 1000°F (538°C)	30 (0.20)
After 1500°F (816°C)	40 (0.28)
After 1800°F (982°C)	40 (0.28)
Permanent Linear Change	
After 220°F (105°C)	-0.1%
After 1000°F (538°C)	-0.4%
After 1500°F (816°C)	-0.6%
After 1800°F (982°C)	-1.6%
Thermal Conductivity	Btu · in/hr · ft ² · °F (W/m · °C)
At 600°F (316°C)	1.4 (0.20)
At 800°F (427°C)	1.3 (0.19)
At 1000°F (538°C)	1.3 (0.19)
At 1200°F (649°C)	1.4 (0.20)

Note: The test data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.

Product Data

Mixing and Using Instructions (Water calculated at 8.337 lb/gallon)	25 lb bag	500 lb bag	750 lb bag
Water Required—Hand Casting/Pouring (Weight 170.0%)			
Pounds	42.5	850.0	1,275.0
Gallons	5.1	102.0	152.9
Liters	19.3	385.2	577.8

For detailed mixing and using instructions, contact your HWI representative or visit www.thinkHWI.com.

Mixing Time: Two (2) minutes maximum.

Working Time 15 minutes

Heatup/Dryout Schedule

See HWI Dryout Schedule 4—PLUS Lightweight Castables and Gunning Castables.

Installation Guidelines

See HWI Installation Guidelines IC-1—Insulating Castables—Standard.

Shelf Life (Under Proper Storage Conditions) 365 days