



**ALSEY**  
refractories co.

# PRODUCT DATA

PILOT D.P.

Super Duty, dry press firebrick of various sizes

## TYPICAL TEST DATA

### CHEMICAL ANALYSIS [Wt. % Calcined Basis]

Silica [SiO <sub>2</sub> ]	52.4
Aluminum Oxide [Al <sub>2</sub> O <sub>3</sub> ]	41.3
Titanium Dioxide [TiO <sub>2</sub> ]	2.2
Iron Oxide [Fe <sub>2</sub> O <sub>3</sub> ]	1.4
Potassium Oxide [K <sub>2</sub> O]	1.4
Other Oxides	0.7
Magnesium Oxide [MgO]	0.4
Calcium Oxide [CaO]	0.2
Total	100.0
Loss on Ignition, 1000°C	0.09

### THERMAL CONDUCTIVITY [K-Factor]

At a mean temperature of		Btu/in ft <sup>2</sup> hr°F	W/m°C
400°F	[205°C]	8.1	1.2
800°F	[425°C]	8.4	1.2
1200°F	[650°C]	9.0	1.3
1600°F	[870°C]	9.2	1.3
2000°F	[1095°C]	9.7	1.4
2400°F	[1315°C]	9.9	1.4

### PHYSICAL PROPERTIES

#### ASTM C-24

P.C.E.	33
Service Temperature [max. recommended], °F	2910
Temperature Equivalent [melting], °F	3169

#### ASTM C-133

Modulus of Rupture [MOR], psi	1300
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#### ASTM C-20

Apparent Porosity, %	15.0
Bulk Density [fired] lb./ft <sup>3</sup>	139

#### ASTM C-16 Schedule 3 [% deformation]

Load Test at 2640°F	1.3
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#### ASTM C-113 Schedule B [% linear]

Reheat Change at 2550°F	0.6%
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SDS AVAILABLE UPON REQUEST

The above properties represent average results of typical data produced from standard ASTM test methods on a 9" straight. Specifications should not be considered guaranteed. Alsey Refractories Company makes every effort to ensure consistency in our products; however, properties may vary due to standard statistical manufacturing deviations. Alsey Refractories Company reserves the right to modify this data at any time without prior notice.



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