

# PRODUCT DATA

## HIGH DUTY FIREBRICK GROG

### ALSEY High Duty Firebrick Grog

#### Description:

Crushed high duty dry pressed firebrick

#### Sizes:

- 10 mesh & down 50lb sacks {4GR110}
- 20 mesh & down 50lb sacks {4GR120}
- 30 mesh & down 50lb sacks {4GR130}

### TYPICAL TEST DATA -- PHYSICAL PROPERTIES

#### ASTM C-24

P.C.E. .... 32-32½  
 Temperature Equivalent (melting), °F.....3123-3135  
 Service Temperature (max. recommended), °F ..... 2850

#### ASTM C-20

Apparent Porosity, % ..... 19.1  
 Apparent Specific Gravity, g/cc..... 2.11  
 Water Absorption, %..... 8.8

### SCREEN ANALYSIS

Retained upon:	10 Mesh		20 Mesh		30 Mesh	
	Individual % Retained	Cumulative % Retained	Individual % Retained	Cumulative % Retained	Individual % Retained	Cumulative % Retained
US 4	0%	0%	0%	0%	0%	0%
US 6	0%	0%	.1%	.1%	0%	0%
US 8	.1%	.1%	3.7%	3.7%	0%	0%
US 10	1%	1.1%	18.1%	21.8%	2.7%	2.7%
US 20	33.7%	34.8%	33.7%	55.5%	40.2%	42.9%
US 30	14.6%	49.4%	13.8%	69.3%	18.3%	61.2%
US 40	12.4%	61.7%	10.1%	79.4%	13.4%	74.6%
US 50	8.9%	70.7%	12.3%	91.8%	15.9%	90.5%
US 70	9.6%	80.3%	4%	95.8%	4.7%	95.2%
Pan	19.7%	100%	4.2%	100%	4.8%	100%

### TYPICAL CHEMICAL ANALYSIS, Wt. % (calcined basis)

Silica (SiO<sub>2</sub>) ..... 56.02  
 Aluminum Oxide (Al<sub>2</sub>O<sub>3</sub>) ..... 37.50  
 Iron Oxide (Fe<sub>2</sub>O<sub>3</sub>) ..... 2.09  
 Titanium Dioxide (TiO<sub>2</sub>)..... 1.99  
 Potassium Oxide (K<sub>2</sub>O) ..... 1.47  
 Magnesium Oxide (MgO)..... 0.36  
 Calcium Oxide (CaO) ..... 0.30  
 Sodium Oxide (Na<sub>2</sub>O) ..... 0.074  
 Zirconium Dioxide (ZrO<sub>2</sub>) ..... 0.068  
 Chromium(III) Oxide (Cr<sub>2</sub>O<sub>3</sub>) ..... 0.039  
 Phosphorous Pentoxide (P<sub>2</sub>O<sub>5</sub>) ..... 0.036  
 Manganese Oxide (MnO)..... 0.007  
 NiO ..... 0.012  
 Total ..... 99.97

Loss on Ignition, 1000°C ..... 0.13

An MSDS is available upon request

#### Contact:

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