

# PRODUCT DATA

## DRY MILLED FIRECLAY

### ALSEY 20 Mesh Dry Milled Fireclay

**Description:**

Raw ground plastic dry milled fireclay

**Sizes:**

50lb bag {3A1050}

**Uses:**

Raw material used by artisans or in commercial applications either as a heat resistant layer or as an additive. Do NOT use as a mortar in residential fireplace construction. This product no longer meets building codes for residential fireplace construction. Please ask for FIREPLACE BULLETIN: Refractory Mortar Standards and Specifications for appropriate alternatives.

**Application:**

200 to 400 lbs. of Dry Milled Fireclay is required to lay up one thousand 9x4½x2½" firebrick.

Joint Type	Water	Dry Fireclay
Trowel	14 quarts	100 lbs
Dipped	18.5 quarts	100 lbs

For best results, mix fireclay and water one day prior to use and let it sit covered.

Dry Milled Fireclay is "Heat Setting" and depends upon high temperature to develop a ceramic bond; these temperatures are not achieved in fireplaces.

**Caution:**

The addition of Portland cement reduces the service temperature of this product below temperatures achieved in fireplaces and does not satisfy building code requirements. Portland cement neither resists the temperature cycling, nor does it possess the necessary acid resistance. Alsey Air-Set Refractory Fireplace Mortar and Flue-Set Non-Water Soluble Refractory Mortar meet these requirements. Product information sheets are available upon request.

**Typical Chemical Analysis, wt. % (dry basis)**



Silica (SiO <sub>2</sub> )	57.80
Aluminum Oxide (Al <sub>2</sub> O <sub>3</sub> )	36.30
Titanium Dioxide (TiO <sub>2</sub> )	1.90
Iron Oxide (Fe <sub>2</sub> O <sub>3</sub> )	1.80
Potassium Oxide (K <sub>2</sub> O)	1.08
Magnesium Oxide (MgO)	0.41
Calcium Oxide (CaO)	0.40
Sodium Oxide (Na <sub>2</sub> O)	0.09
<b>Total</b>	<b>99.78</b>
Loss on Ignition, 1000°C, %	11.40

**TYPICAL TEST DATA -- PHYSICAL PROPERTIES**

ASTM C-24

P.C.E.	31½
Temperature Equivalent (melting), °F	3090
Service Temperature (max. recommended), °F	2700

**SCREEN ANALYSIS**

Retained Upon	Individual Retained
US 20	17.1%
US 40	21.2%
US 70	16.5%
US 200	15.7%
Pan	29.5%

An SDS is 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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