PRODUCT DATA

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.

<table>
<thead>
<tr>
<th>Joint Type</th>
<th>Water</th>
<th>Dry Fireclay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trowel</td>
<td>14 quarts</td>
<td>100 lbs</td>
</tr>
<tr>
<td>Dipped</td>
<td>18.5 quarts</td>
<td>100 lbs</td>
</tr>
</tbody>
</table>

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:
Job-site prepared fireclay mixes containing Portland do not meet national or state building codes. The addition of Portland cement reduces the service temperature of this product well below temperatures achieved in fireplaces and thus does not satisfy building code requirements. Portland cement neither resists the temperature cycling, nor does it possess the necessary acid resistance. As a result, we have developed Alsey Air-Set Refractory Fireplace Mortar and Flue-Set Non-Water Soluble Refractory Mortar to meet these requirements. Product information sheets are available upon request.

Typical Chemical Analysis, wt. % (dry basis)

- Silica (SiO₂) ................................................................. 57.80
- Aluminum Oxide (Al₂O₃) ............................................... 36.30
- Titanium Dioxide (TiO₂) ............................................... 1.90
- Iron Oxide (Fe₂O₃) ...................................................... 1.80
- Potassium Oxide (K₂O) .................................................. 1.08
- Magnesium Oxide (MgO) .............................................. 0.41
- Calcium Oxide (CaO) ................................................... 0.40
- Sodium Oxide (Na₂O) .................................................. 0.09
- Total ............................................................................ 99.78
- 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

<table>
<thead>
<tr>
<th>Retained Upon</th>
<th>Individual Retained</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 20</td>
<td>17.1%</td>
</tr>
<tr>
<td>US 40</td>
<td>21.2%</td>
</tr>
<tr>
<td>US 70</td>
<td>16.5%</td>
</tr>
<tr>
<td>US 200</td>
<td>15.7%</td>
</tr>
<tr>
<td>Pan</td>
<td>29.5%</td>
</tr>
</tbody>
</table>

An SDS is available upon request

Contact:
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