**PRODUCT DATA**

**ALUMEX® P-7**

**Description:** ALUMEX® P-7 is phosphate-bonded with high strength and load-bearing ability, low porosity and modulus of elasticity, and excellent resistance to abrasion, erosion and mechanical abuse. Its physical characteristics are considered second to none in the realm of “70%-alumina” brick.

Physical properties shown are averages based on standard brick sizes. ASTM test methods used where applicable.

<table>
<thead>
<tr>
<th>Property</th>
<th>As Received</th>
<th>165</th>
<th>(2.64 g/cm³)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bulk Density (pcf)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Modulus of Rupture (psi)</strong></td>
<td>At 70°F (21°C)</td>
<td>1800</td>
<td>(127 kg/cm²)</td>
</tr>
<tr>
<td><strong>Cold Crushing Strength (psi)</strong></td>
<td>At 70°F (21°C)</td>
<td>10000</td>
<td>(700 kg/cm²)</td>
</tr>
<tr>
<td><strong>Apparent Porosity (%)</strong></td>
<td>As Received</td>
<td>12.5</td>
<td></td>
</tr>
<tr>
<td><strong>Permanent Linear Change (%)</strong></td>
<td>After 2950°F (1621°C)</td>
<td>+3.0</td>
<td></td>
</tr>
</tbody>
</table>

**Typical Chemical Analysis (%)**
(Calcined Basis)

- Alumina (Al₂O₃) ................. 71.5
- Silica (SiO₂) .................. 21.6
- Iron Oxide (Fe₂O₃) ............ 1.1
- Titania (TiO₂) .................. 2.9
- Lime (CaO) ...................... 0.1
- Magnesia (MgO) ................. 0.1
- Phosphorus Pentoxide (P₂O₅) ... 2.3
- Alkalis (Na₂O+K₂O) ............ 0.4

**Brand Code:** 1214

The properties shown on this data sheet represent typical average results using standard ASTM test methods (unless otherwise noted) conducted under controlled condition (using standard rectangular shapes), and should not be considered to be guaranteed specifications. Properties are subject to normal manufacturing statistical standard deviation ranges, and Resco Products, Inc. reserves the right to modify the properties and specifications at any time without prior notice.

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01/29/21 is the date that this data sheet was updated. Check with your RESCO sales representative or RESCO website to determine you have the current sheet.

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