STEEL-PAK 90Cr

General Information

STEEL-PAK 90Cr is a phosphoric acid-bonded, high-alumina refractory plastic designed to have outstanding abrasion and corrosion resistance. STEEL-PAK 90Cr is excellent for severe applications due to its chromium oxide addition. This additive combines with a coarse grain alumina matrix resulting in a construction grade refractory plastic well suited for a diverse number of applications. STEEL-PAK 90Cr is ideal for iron runner spouts, arc furnace delta sections and spouts, BOF cones, tundish impact pads and patching, degasser snorkels, nozzle and well assemblies, top cap and spout repairs, and burner ports. This product offers the following benefits and features:

- Excellent hot strength
- Chromium oxide addition provides resistance to corrosion by metal/slag
- Resistant to abrasion

Technical Data

<table>
<thead>
<tr>
<th>Chemical Analysis</th>
<th>Material Required</th>
<th>2.93 g/cm³ (183 lbs./ft³)</th>
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</thead>
<tbody>
<tr>
<td>(Major Components)</td>
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<tr>
<td>Al₂O₃ 73.1%</td>
<td>Grain Size</td>
<td>4 mesh (5 mm) and finer</td>
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<tr>
<td>SiO₂ 12.3%</td>
<td>Maximum Use Temperature</td>
<td>1760°C (3200°F)</td>
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<tr>
<td>Cr₂O₃ 7.3%</td>
<td>Installation Method</td>
<td>Pneumatic ram or hand tamp</td>
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<tr>
<td>P₂O₅ 3.8%</td>
<td>Procedure(s)</td>
<td>G-56</td>
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</table>

Packaged in 25.0 kg (55 lb.) cartons with plastic liners. Store in a cool, dry location. Keep from freezing. In order to maintain optimum workability characteristics, storage over 6 months is not recommended.

Allied Mineral Products, Inc. supplies a complete line of monolithic refractories for the metals industry. For more information or a complete evaluation of your refractory requirements, please contact your local Allied representative.

Warning: Contains phosphoric acid, aluminum oxide, aluminum silicates, chromium oxide and silica. The International Agency for Research on Cancer (IARC) has classified crystalline silica inhaled in the form of quartz or cristobalite carcinogenic to humans. Chromium compounds may be a cancer hazard. Refer to Material Safety Data Sheet for additional information and disposal instructions. Avoid contact with skin and eyes. Product may cause skin and eye irritation. Wear protective gloves and safety goggles. Wear NIOSH approved respirator during installation, removal, and disposal of product to prevent inhalation of dust. Steam spalling, which can lead to personal injury, may result from improper drying and firing procedures. For safest use and optimum performance, proper practices must be followed. In case of eye contact, flush immediately and repeatedly with water and consult a physician.

(SP90CR)
3/24/14
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DRY-OUT SCHEDULE FOR PHOSPHATE-BONDED PLASTICS
5" (125 mm) WALL THICKNESS

[Hold 1 hour for every 1" (25 mm) of wall thickness]

- 50°F/28°C/Hour
- Hold until steaming subsides if necessary.
- 5 Hour Hold
- 100°F (56°C)/Hour until service temperature is reached.
- Hold until steaming subsides if necessary.