Ciment Fondu® Lafarge

Applications

- CIMENT FONDU® LAFARGE is a hydraulic binder with an alumina content of approximately 40%.
- Composed mainly of the calcium aluminate phase, CIMENT FONDU® LAFARGE can be used as the primary binder or in combination with other reactive minerals. These combinations become the binder in many construction products such as tile adhesives, self-leveling underlayments, and patching materials.
- As a binder, CIMENT FONDU® LAFARGE reacts with most organic and mineral additives to achieve exceptional flow with high early compressive strength.
- CIMENT FONDU® LAFARGE additions to Portland cement will accelerate the initial set from hours to minutes depending on the type and mill of manufactured Portland cement.
- CIMENT FONDU® LAFARGE is a very dark gray color.
- Colorimetry data is available on request.

General characteristics

1 Mineralogical composition

<table>
<thead>
<tr>
<th>C = CaO</th>
<th>A = Al₂O₃</th>
<th>S = SiO₂</th>
<th>F = Fe₂O₃</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 37.0</td>
<td>≤ 39.8</td>
<td>≤ 6.0</td>
<td>≤ 18.5</td>
</tr>
</tbody>
</table>

- Principal mineralogical phase: Monocalcium aluminate (CA)
- Secondary phases: C₁₂A₇, C₂S, Ferrites, C₄AF

2 Chemical composition

<table>
<thead>
<tr>
<th>Main constituents (%)</th>
<th>Al₂O₃</th>
<th>CaO</th>
<th>SiO₂</th>
<th>Fe₂O₃</th>
</tr>
</thead>
<tbody>
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<td>≥ 37.0</td>
<td>≤ 39.8</td>
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<td>≤ 18.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minor constituents (%)</th>
<th>TiO₂</th>
<th>MgO</th>
<th>SO₂</th>
<th>K₂O+Na₂O soluble</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 4.0</td>
<td>&lt; 1.5</td>
<td>&lt; 0.4</td>
<td>&lt; 0.4</td>
<td></td>
</tr>
</tbody>
</table>

3 Physical properties

- Bulk density: 1.16 – 1.37 g/cm³ (72.4 – 85.5 lb/ft³)
- Specific gravity: approx. 3.24
- Fineness: 3600-4400 cm²/g (ASTM C204)
- Residue at 90 microns: < 8% maximum

4 Sand mortar properties (EN-196)

- Flow at 15 min: ≥ 30% (ASTM C1437)
- Vicat set: 120-240 min.
- Compressive strength (ASTM C349)
  - 6 hr: ≥ 2900 psi (20.0 MPa)
  - 24 hr: ≥ 4900 psi (33.8 MPa)

Packaging

CIMENT FONDU® LAFARGE does not contain any additives. CIMENT FONDU® LAFARGE packaging is designed to protect it from humidity. However, it is recommended that CIMENT FONDU® LAFARGE not be placed in direct contact with the ground. When correctly stored, the shelf life of CIMENT FONDU® LAFARGE is at least 6 months. In most cases, its properties are retained for over a year.

The above listed properties typically represent the product manufactured by LCA. For warranty information and current product specifications per our ISO 9001 manufacturing environment, please contact an LCA technical manager for a copy of the current Specification Sheet.