Glassbond Sauereisen Electric Heater Cement No. 6

Characteristics

- Withstands white heat
- Withstands temperatures to 2500°F (1371°C)
- Heat conductive and thermal shock resistant
- Resists oil, solvents and most acids (except hydrofluoric)
- Excellent abrasion resistance
- Can be applied to practically any surface
- Odourless
- Air sets to extreme hardness
- Excellent for embedding and insulating

Recommended For

- Appliances
- Coatings
- Insulating
- Embedding
- Moulding
- Heaters

Description

Glassbond Sauereisen Electric Heater Cement No. 6 is a versatile high-temperature cement used for refractory coatings, lining furnaces, embedding electric heating elements, coating resistors, moulding and insulating. No. 6 is supplied in powder form and needs only be mixed with water to apply.

Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Tan to grey</td>
</tr>
<tr>
<td>Compressive strength @ 7 days</td>
<td>2700 psi (189 kg/cm²)</td>
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<tr>
<td>Di electric constant</td>
<td>5.0-7.0</td>
</tr>
<tr>
<td>Dielectric strength @ 70°F (21°C)</td>
<td>12 to 51.0 Volts/mil (490 to 2,000 Volts/mm)</td>
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<tr>
<td></td>
<td>@ 750°F (399°C) 12 to 51.0 Volts/mil (490 to 2,000 Volts/mm)</td>
</tr>
<tr>
<td></td>
<td>@ 1,475°F (802°C) &lt; 15.0 Volts/mil (59 Volts/mm)</td>
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<tr>
<td>Flexural strength</td>
<td>320 psi (22 kg/cm²)</td>
</tr>
<tr>
<td>Maximum service temperature</td>
<td>2500°F (1371°C)</td>
</tr>
<tr>
<td>Volume resistivity @ 70°F (21°C)</td>
<td>10²-10⁹ ohm-cm</td>
</tr>
<tr>
<td></td>
<td>@ 750°F (399°C) 10⁴-10⁵ ohm-cm</td>
</tr>
<tr>
<td></td>
<td>@ 1,475°F (802°C) 10²-10³ ohm-cm</td>
</tr>
</tbody>
</table>

Physical properties were determined on specimens prepared under laboratory conditions using applicable ASTM procedures. Actual field conditions may vary and yield different results; therefore, data are subject to reasonable deviation. Data should not be used for specification purposes.

Application/Instructions

MIXING – Glassbond Sauereisen No. 6 Powder should be thoroughly remixed before adding water. Recommended mix ratio is 75-80% Powder to 20-25% Potable water by weight. Place water in clean mixing container. Gradually add No. 6 Powder to water while mixing. Continue mixing until a uniform, smooth consistency is obtained. Mixing may be done with a slow-speed mixer or by hand with a spatula. Minimum amount of water should be used as excess water reduces mechanical strength, increases shrinkage and delays set time. After mixing, place in an air-tight container to soak for at least 24 hours before using. Remix again to attain its Original consistency.

APPLICATION - Surfaces to receive No. 6 Cement should be clean and free of grease or dirt. Porous substrates should be dampened slightly with Sauereisen Thinning Liquid No. 14 prior to application. No. 6 should be used in thin applications; apply several coats where a heavy layer is desired. In multiple coat applications, each coat must be thoroughly dry prior to application of additional coats. If necessary, Thinning Liquid No. 14 should be used where No. 6 Cement is required in a thinner consistency. No. 6 should not be applied at a thickness greater than 1/4 inch.
Setting/Curing

No. 6 cures by air drying at room temperature. Drying time depends on the consistency and thickness of the application. Normally 18 to 24 hours drying at ambient temperature is sufficient. When the cement has minimal exposure to air, or if it is desired to accelerate the cure, low temperature oven drying at 180°F can be used. Avoid steaming while drying. If the cement will be exposed to elevated temperatures, contact Sauereisen for appropriate drying schedule recommendations. If high humidity resistance is required and it is impractical to fire No. 6 Cement, a moisture-resistant lacquer or silicone coating should be applied to the exposed surfaces.

Cleaning

All equipment should be cleaned with soap and water before No. 6 cures. If removal is required after cure, a low concentration of sodium hydroxide may dissolve the cement. Consult Sauereisen for other recommendations.

Packaging

This material is supplied in various types and sizes of containers. Please contact Glassbond Sales for further details.

Shelf Life

Sauereisen No. 6 has a shelf life of one year when stored in unopened, tightly sealed containers in a dry location at 70°F. If there is doubt as to the quality of the material, consult Glassbond.

Caution

Consult the Material Safety Data Sheet and container label caution statements for any hazards in handling this material.

Warranty

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. WE GIVE NO WARRANTY, WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE OR OTHERWISE, EXPRESS OR IMPLIED, OTHER THAN AS EXPRESSLY SET FORTH HEREIN. Users shall determine the suitability of the product for intended application before using.

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