**Product Description Sheet**

Loctite 7232 High Temperature Wear Resistant Putty

**March 2000**

**PRODUCT DESCRIPTION**

Loctite 7232 High Temperature Wear Resistant Putty is a ceramic filled epoxy. It contains varied size ceramic particles that resist wear, abrasion, corrosion and cavitation and is heat resistant to 205°C.

**Special Features**

- Non sag – can be used on overhead and vertical surfaces.
- Easy to mix and use – renews worn surfaces fast, reduces downtime.
- Ceramic filled – resists abrasion and cavitation. Prolongs equipment life.
- Excellent adhesion – forms a permanent bond.

**TYPICAL APPLICATIONS**

- Filling cavitation or providing protective coating in pump impellers and housings.
- Repairing wear or providing protective coating in pipe systems.
- Repairing and resurfacing valve parts.
- Filling areas subjected to sliding wear and abrasion.
- Repairing or providing protective coating on turbine blades.

**PROPERTIES OF UNCURED MATERIAL**

<table>
<thead>
<tr>
<th>Mixture</th>
<th>Typical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Grey Paste</td>
</tr>
<tr>
<td>Mix Ratio (R:H) by Volume</td>
<td>4:1</td>
</tr>
<tr>
<td>by Weight</td>
<td>5.33:1</td>
</tr>
</tbody>
</table>

**TYPICAL CURING PERFORMANCE**

<table>
<thead>
<tr>
<th>Curing Properties</th>
<th>Typical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(@ 25°C unless noted)</td>
<td>45</td>
</tr>
<tr>
<td>Working Life, minutes</td>
<td>6-8</td>
</tr>
<tr>
<td>Cure Time, hours</td>
<td></td>
</tr>
</tbody>
</table>

**TYPICAL PROPERTIES OF CURED MATERIAL**

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Typical Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength, ASTM D695, (N/mm²)</td>
<td>103</td>
</tr>
<tr>
<td>Tensile Strength, ASTM D638 (N/mm²)</td>
<td>59</td>
</tr>
<tr>
<td>Hardness ASTM D-2240, Shore D</td>
<td>90</td>
</tr>
</tbody>
</table>

**DIRECTIONS FOR USE**

1. **Success with High Temperature Steel Putty**
   - Mix 4 parts resin to 1 part hardener by volume (5.33 to 1 by weight) mix thoroughly until colour is consistent (if resin and hardener temperatures are below 15°C or below, preheat resin only to about 30°C but not to exceed 40°C).
   - Apply a thin layer of product onto surface to “wet” for good adhesion as soon after grit blasting as possible.
   - Trowel addition material at least 6mm thick.
2. **To slow the cure of epoxies at high temperatures:**
   - Mix epoxy in small masses to prevent rapid curing.
3. **To speed the cure of epoxies at low temperatures:**
   - Pre-heat repair surface until warm to the touch.
4. **At 23°C the working time is 30 mins. Working & cure time depend on temperature & mass – the higher the temperature and the larger the mass, the faster the cure.**
5. **Cure time is 8hrs @ 23°C or higher followed by a 3hr cure at 150°C and a post cure at 200°C for 3 hrs.** If this is not possible warm to 40°C for 1 hr. Then raise temperature to 150°C-260°C maximum and maintain for a minimum of 2 hrs.
6. **TECHNICAL TIPS FOR WORKING WITH EPOXIES**

- **Work time and cure time depends on temperature and mass:**
  - The higher the temperature, the faster the cure.
  - The larger the mass of the material, the faster the cure.
7. **To speed the cure of epoxies at low temperatures:**
   - Pre-heat repair surface until warm to the touch.
8. **To slow the cure of epoxies at high temperatures:**
   - Mix epoxy in small masses to prevent rapid curing.

**GENERAL INFORMATION**

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

**Storage**

Product shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8°C to 28°C unless otherwise labelled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container. For further specific shelf life information, contact Loctite UK Technical Service.

**Note**

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