

# PT5965 High Temp Bushing Potting and Repair Material

# **DESCRIPTION**

PT5965 A/B is a smooth, slightly thixotropic cream colored paste epoxy system designed for general patching, and the bonding or potting of inserts and bushings into tools and fixtures. PT5965 consists of an off-white resin and a tan hardener that combine to form an excellent room temperature curing, high temperature adhesive that bonds very well to a variety of substrate. It works quite well as a bushing potting compound, where its high temperature capabilities and toughness prevent premature failure of such tools.

### **PRODUCT SPECIFICATIONS**

|                                | PT5965 Part A                          | PT5965 Part B | ASTM Method |
|--------------------------------|--|---------------|-------------|
| Color                          | Off-White                              | Tan           | Visual      |
| Viscosity, @77°F, centipoise   | 5,000 cps                              | Thin Paste    | D2392       |
| Specific Gravity, gms./cc      | 1.61                                   | 1.08          | D1475       |
| Mix Ratio                      | 100 : 25 By Weight *, 3 to 1 By Volume |               | PTM&W       |
| Pot Life, 4 fl.oz. Mass @ 77°F | See Cha                                | D2471         |             |

<sup>\*</sup> The mix ratio for PT5965 A/B is variable between 100 : 20 and 100 : 30 by weight, so that the handling and cured properties of the material can be adjusted to fit the application.

#### HANDLING and CURING

PT5965 A/B will achieve a good cure at ambient temperatures (75°F minimum), and 18 to 24 hours at this temperature is sufficient. The pot life is relatively short, to allow good cures in thin sections and small masses. The cure can be accelerated by the use of heat lamps or an oven cure of 1 to 2 hours @ 150°F, after an overnight cure. When using heat lamps, care should be taken to avoid hot spots which can cause unnecessary and excessive shrinkage.

### **PACKAGING WEIGHTS**

|               | Quart Kit | Gallon Kit | Pail Kit |
|---------------|-----------|------------|----------|
| PT5965 Part A | 2.5 lb.   | 10 lb.     | 55 lb.   |
| PT5965 Part B | .66 lb.   | 2.5 lb.    | 14 lb.   |
| Kit           | 3.16 lb.  | 12.5 lb.   | 69 lb.   |

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## **TYPICAL MECHANICAL PROPERTIES**

|  | PT5965 A / B                           | ASTM Method |
|--|--|-------------|
| Mix Ratio, By Weight, Volume                     | 100 : 25 By Weight *, 3 to 1 By Volume | PTM&W       |
| Color  | Cream                                  | Visual      |
| Mixed Viscosity, @77°F, centipoise               | Non-Sag Paste *                        | D2393       |
| Pot Life, 4 fl. Oz. Mass, @77 <sup>o</sup> F     | 26 minutes *                           | D2471       |
| Cured Hardness, Shore D                          | 92 Shore D *                           | D2240       |
| Shrinkage, inch/inch, Mold Number 0, 0.17 Gallon | .0002                                  | D2566       |
| Specific Gravity, grams, cc                      | 1.46                                   | D1475       |
| Density, lb./cu. lnch lb. / gallon               | .0527<br>12.2                          | D792        |
| Specific Volume, cu. in./lb.                     | 18.9                                   |             |
| Tensile Strength, psi                            | 4,970 psi                              | D638        |
| Compressive Strength, psi                        | 15,750 psi                             | D695        |

# **SPECIAL INFORMATION**

\* The mix ratio for PT5965 A/B is variable between 100 : 20 and 100 : 30 by weight, so that the handling and cured properties of the material can be adjusted to fit the application. The range of properties available are:

| 1 1  |                       | 3       | 1.1            |         | 1 1     |         |  |  |
|--|-----------------------|---------|----------------|---------|---------|---------|--|--|
| Chart 1 - Effect of Ratio Change on Pot Life, Viscosity & Hardness |                       |         |                |         |         |         |  |  |
| Mix  |                       |         | CURED HARDNESS |         |         |         |  |  |
| Ratio  | tio Viscosity         | Time    | @ R.T.         | @ 150°F | @ 250°F | @ 350°F |  |  |
| 100 : 20   | Thin Non-Sag Paste    | 30 min. | 92 D           | 90 D    | 90 D    | 75 D    |  |  |
| 100 : 25   | Medium Non-Sag Paste  | 26 min. | 92 D           | 90 D    | 90 D    | 66 D    |  |  |
| 100 : 30   | Thicker Non-Sag Paste | 15 min. | 93 D           | 91 D    | 91 D    | 58 D    |  |  |

#### SAFETY and HANDLING

PTM&W epoxy products are made from raw materials carefully chosen to minimize or even eliminate toxic chemicals, and therefore offer the user high performance products with minimum hazard potential when properly used. Generally, the PTM&W epoxy resins and hardeners will present no handling problems if users exercise care to protect the skin and eyes, and if good ventilation is provided in the work areas. However, breathing of mist or vapors may cause allergenic respiratory reaction, especially in highly sensitive individuals. As such, avoid contact with eyes and skin, and avoid breathing vapors. Wear protective rubber apron, clothing, nitrile rubber gloves, face shield or other items as required to prevent contact with the skin. In case of skin contact, immediately wash with soap and water, followed by a rinse of the area with vinegar, and then a further wash with soap and water. The vinegar will neutralize the hardener and lessen the chances of long term effects. Use goggles, a face shield, safety glasses or other items as required to prevent contact with the eyes. If material gets into the eyes, immediately flush with water for at least 15 minutes and call a physician. Generally, keep the work area as uncluttered and clean as possible, and clean up any minor spills immediately to prevent accidental skin contact at a later time. Keep tools clean and properly stored. Dispose of trash and empty containers properly. Do not use any of these types of products until Material Safety Data Sheets have been read and understood.

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