

## Reprorubber<sup>®</sup> Putty – Instruction Manual

Note to Users: This instruction manual is for the do-it-yourselfer, and contains the basic application and physical properties information on Reprorubber<sup>®</sup> Putty.

If you would like Greene Tweed to perform the molds, fill out the contact form on www.gtweed.com

Or you can purchase a Reprorubber® Putty kit through Reprorubber® by visiting their website: http://reprorubber.com

Reprorubber<sup>®</sup> Putty is a two-component, addition cured, platinum catalyzed, hydrophobic vinyl polysiloxane. It is hand-mixed to obtain a uniform mixture, and may be used to reproduce surface characteristics.

Reprorubber<sup>®</sup> is used mainly for external and shallow internal molding. It is able to reproduce surfaces down to submicron particles or scratches. Reprorubber<sup>®</sup> is cured at room temperature; however, temperature variations can affect the setting time.

## How to Apply

- Roll two equal-sized balls of catalyst putty and base putty and knead them together like dough.
- Spread over master, pushing down with fingers, and wait 8-10 minutes to cure.
- Manipulation time is 1 or 2 minutes 12 minutes from start to finish.
- You can cast internal shapes and cavities, but pressure should be applied, such as a weighted object on top.

## **Physical Properties and Applications**

Appearance (base paste)	Blue, smooth, non-tacky; filling loading $\sim$ 40% silicon dioxide; contains $\sim$ 5% organic phthalate plasticizer.
Mix time	<ul> <li>30 seconds; larger amounts may take up to 1 minute</li> <li>Working time (prior to gelation) – 2.5 to 3 minutes</li> </ul>
Setting time (at room temperature)	5 to 6.5 minutes; varies w/ambient temperature. Warmer temperatures accelerate setting time, cooler temperatures slow setting time.
Compression set (recovery from deformation)	0.5%
Strain in compression (a modified modulus of elasticity)	1.5%
Final hardness	Shore A50
Dimensional change	<ul> <li>After 24 hours – 0.50% change (-50% change) – shrinks 0.50%</li> <li>After 7 days – 0.50% change (-50% change) – shrinks 0.50%</li> </ul>
Tear strength	375 psi
Flash point of the polymers used	130°C (266°F)
Ignition temperature of polymers used	470°C (878°F) – fully set material may be autoclaved, but its dimensional stability may be compromised. If allowed to return to room temperature, should return to original shape.
Disinfection	Since material is hydrophobic, immersion in disinfectants is acceptable. The surface color may change due to the disinfectants used.

Note: Determined at 23°C (72°F), tested in accordance with ISO 4823