



## ***Product Bulletin: Partall® Hi-Temp Wax***

### ***General Information***

Partall® Hi-Temp Wax is a wax polishing compound made from a blend of hydrocarbon and microcrystalline waxes and polytetrafluoroethylene (Teflon®).

It is recommended as a release agent in high temperature processes up to 350°F (~177° C) where standard silicone waxes hinder post-finishing operations.

Partall® Hi-Temp Wax is particularly suitable for use with epoxies or other resins that cure and/or catalyze at high temperature i.e., 150°F (~166° C) or greater and is compatible with most thermoset resins and substrate materials.

It is recommended that PVA such as Partall® Film #10 or Partall® Coverall Film be used in conjunction with Partall® Hi-Temp Wax to achieve adequate protection on molds that are particularly intricate or too expensive to risk demolding problems.

### ***Preparation of Mold Surface***

Porous molds (i.e., plaster or wood) must first be sealed with lacquer or similar coating. A good surface on plaster may be obtained with automobile type primer-sealers and lacquers. Plaster molds must be completely dried.

Mold surface should be thoroughly clean and free of other parting agents, especially those containing silicone, prior to application of Partall® Hi-Temp Wax.

### ***Application of Partall® Hi-Temp Wax***

#### ***New / Reconditioned Molds***

Using a clean, dry cloth or sponge, apply a thin, even coat of Partall® Hi-Temp Wax to the surface of the mold, covering 3 to 4 square foot (~0.4 m<sup>2</sup>) sections at a time. Excess should be wiped away.

Allow wax to sit on mold until moderately dry (wax will appear hazy). Polish to a high shine using clean toweling by hand or use a dual action power buffer equipped with a terry cloth or lamb's wool

pad. Keep power buffer moving constantly so as not to allow a build-up of friction that could burn through the wax coating. Surface should be buffed to a glossy finish.

In order to insure complete coverage of mold surface, repeat entire process 3 times for initial molding cycle. Alternate rubbing motions during application of each coat (i.e., up-down on one coat, left-right on another, circular on another).

Wait approximately one hour after application of final wax coat before proceeding. Apply one coat of Partall® Hi-Temp Wax following every cycle thereafter until mold is broken in.

#### ***Seasoned Molds***

Using the same process described for new molds, apply one coat of Partall® Hi-Temp Wax to mold surface and buff. Re-wax mold as necessary.

#### ***Removing Part from Mold***

The best procedure for separating the part from the mold depends on the size and shape of the part.

In most cases the part can be lifted from the mold after loosening around the edges. A jet of air between the part and the mold at the edge is sometimes useful.

On large curved parts it may be necessary to first tap over the surface with a rubber mallet.

A very strong blast of air (or a few squirts with a CO<sub>2</sub> extinguisher) will free very rigid parts that cannot be flexed.

On a well-conditioned mold, the part should loosen and fall away easily. Using Partall® Hi-Temp Wax regularly can assist in the conditioning process, reducing parting problems and increasing production cycle efficiency.

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable. No guarantee of their accuracy is made, however, and the products discussed are sold without warranty, express or implied, and upon conditions that the purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses. Revised January 20, 2009.