



## Application Guide

# PARTALL® Hi-Temp Wax

PARTALL® Hi-Temp Wax is a premium mold release wax formulated from a blend of hydrocarbon and microcrystalline waxes and fortified with PTFE polymer. It is particularly recommended for use with epoxies or phenolics or as part of molding processes that cure and/or catalyze at higher temperatures (150 - 350 °F (65 - 177 °C)) when casting composites parts or molds from plugs. PARTALL® Hi-Temp Wax may be used with most thermoset resins at ambient or elevated temperature cure, and is especially useful in applications where standard silicone waxes hinder post-finishing operations. PARTALL® Hi-Temp Wax has a creamy texture that makes for ease of application.

Use PARTALL® Film #10 or PARTALL® Coverall Film in conjunction with PARTALL® Hi-Temp Wax to initialize new or reconditioned polyester or vinylester molds, or on molds that are particularly intricate or too expensive to risk demolding problems.

### PREPARING THE MOLD SURFACE

Remove other parting agents and contaminants such as silicone, dust, and compressor oil using FORMULA FIVE® Mold Cleaner #2 and allow to dry completely prior to application of PARTALL® Hi-Temp Wax. Porous molds (i.e., plaster or wood) must be sealed; composites grade sealers are recommended but fairing compounds, automobile type primer-sealers, and lacquers may be sufficient. Rough wood molds or plugs used to create non-cosmetic parts may be adequately sealed with a number of coats of PARTALL® Hi-Temp Wax. Best practice is to allow residual solvents to out-gas from sealers and waxes for at least one hour after application.

### DIRECTIONS FOR USE

Use in a well-ventilated area with appropriate personal protection. Use a clean dry cloth or applicator pad to apply a thin even coat of PARTALL® Hi-Temp Wax to mold surface; 0.5-1.0 gm is sufficient to cover approximately 1 yd<sup>2</sup> (1 m<sup>2</sup>). Remove excess wax with clean dry cloth. Begin buffing when wax is moderately dry and appears hazy. A power buffer equipped with a terry cloth or lamb's wool pad will reduce labor time on larger molds. Keep power buffer moving constantly so as not to allow build-up of friction that could burn through the wax coating. Surface should be buffed to a glossy finish.

Complete coverage is more important than wax film thickness. In order to insure complete coverage, repeat application and polishing process at least three times when initializing new or reconditioned molds or plugs. Alternate rubbing motions during application of each coat (i.e., up-down, left-right, circular) and polish each coat before applying the next. Apply one coat of PARTALL® Hi-Temp Wax following each cycle thereafter until mold is broken in. Re-wax mold as necessary throughout production. Allow at least one hour after application of final coat for residual solvents to out-gas before applying polyvinyl alcohol (PVA) coating or casting parts.

The best procedure for separating parts from a mold depends on the size and shape of the part. In most cases a part can be lifted from the mold after loosening around the edges. On large curved parts it may be necessary to first tap over the surface with a rubber mallet. Injecting compressed air between the part and mold at the edge is sometimes useful in freeing very rigid parts that cannot be flexed.

*PARTALL® Hi-Temp Wax is packaged in 12 ounce (340 gram) cans.*