

Application Guide FORMULA FIVE® Mold Release Wax

FORMULA FIVE[®] Mold Release Wax is a premium mold release wax that blends carnauba, nature's most durable protection, with modern polymers and hydrocarbon waxes. Formulated to produce high shine cosmetic parts from most thermoset casting resins on most mold and plug substrates. Polymers are added to provide easy application, extended open working time, and positive multiple releases in even the most demanding demolding situations.

Recommended for use with companion product FORMULA FIVE[®] Clean 'N Glaze as a simple two-step fiberglass mold maintenance system to ease the release of gel coated parts and maintain fiber reinforced plastic (FRP) mold surfaces. Also useful for non gel coated composite casting.

Use PARTALL® Film #10 or PARTALL® Coverall Film in conjunction with FORMULA FIVE® Mold Release 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

Molding surface must be thoroughly dry and free of other parting agents and contaminants such as silicone, dust, and compressor oil prior to application of FORMULA FIVE® Mold Release Wax. Porous molds (i.e., plaster or wood) must be sealed; composites grade sealers such as FORMULA FIVE® Mold Sealer are recommended but fairing compounds, automobile type primer-sealers, and lacquers may be sufficient. For optimum results, clean and polish mold surface with FORMULA FIVE® Clean 'N Glaze buffing compound prior application of FORMULA FIVE® Mold Release 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 FORMULA FIVE® Mold Release Wax to mold surface; 0.5-1.0 gm is sufficient to cover approximately 1 yd² (1 m²). If buffing by hand, apply to a small section and begin buffing when wax is moderately dry, approximately ten minutes after application. If wax wipes away easily or "balls up" when buffing then FORMULA FIVE® Mold Release Wax has not been allowed to dry long enough. 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; a properly prepared mold surface should be smooth and free of streaks or smudges.

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 FORMULA FIVE® Mold Release 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.

FORMULA FIVE® Mold Release Wax is packaged in 12 ounce (340 gram) cans.