



How to use TAP PVA Mold Release Liquid

General Information

TAP PVA Mold Release Liquid is a water/alcohol solution of water-soluble, film-forming materials. It is particularly recommended as a parting agent for separation between polyester or epoxy resins and various mold surfaces. It is not recommended for use with resins containing water or giving off water during cure (i.e., phenolics) or with automotive finishes, as damage may occur.

TAP PVA Mold Release Liquid will not shrink and pull away from corners or curved surfaces. After resin has dried, the film parts easily from the mold and is readily dissolved from the molded parts with water. An occasional coating of Partall® Paste #2 is required on most mold surfaces before application of TAP PVA Mold Release Liquid.

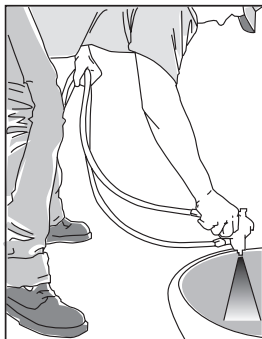
Preparation of Mold Surface

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 first be thoroughly dried.

Mold surfaces should be free of other parting agents, especially those containing silicone.

Cleaning with fine steel wool or sandpaper will not affect the high gloss obtained with TAP PVA Mold Release Liquid. Deep scratches or pits will fill with solution, however, and increase drying time.

Application of TAP PVA Mold Release Liquid



Apply Partall® Paste #2 according to instructions prior to use of parting film.

TAP PVA Mold Release Liquid is ready to use as received and should not be diluted. It is best applied to mold surface using a spray gun although it can be brushed on depending on desired post-production finish.

Best results are achieved with as fine a spray as possible. To achieve this result, use a small orifice in the gun, close the needle about halfway, and adjust the air pressure to 80-100 psi at the gun (setting may vary depending on equipment used). Normal spraying distance is from 12-18 inches – TAP PVA Mold Release Liquid should atomize prior to contact with mold surface.

Apply a thin mist coat first and allow to dry completely (approximately 10-15 minutes). Follow with two heavier flow coats, allowing each coat to dry completely before proceeding (approximately 30-45 minutes). A spray density that just allows the liquid to flow together and form a continuous film is ideal.

Dry film thickness must be at least 2-4 mils on new or reconditioned molds and 1-2 mils on seasoned molds (2 mils is the approximate thickness of an industrial-type trash bag). One gallon will cover about 400 square feet.

Drying time per coat is approximately 15-45 minutes (depending on thickness) with normal application. External factors such as humidity, proximity to sunlight, and the use of fans or heaters can cause drying time to vary. Film must be completely dry before proceeding with molding. Applying additional coats before a previous coat has dried thoroughly can compromise TAP PVA Mold Release Liquid's ability to adequately protect mold surface and prevent part from sticking. Film should be very smooth and glossy when dry – a dull film may result from insufficient spray and may contain pinholes.

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 will free very rigid parts that cannot be flexed.

TAP PVA Mold Release Liquid will stay with the part and can be easily removed with water. Spray gun can be cleaned with water also. Warm water is recommended although cold water is sufficient. Do not use solvents to remove TAP PVA Mold Release Liquid as they will not be able to dissolve film only.

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.

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