

Release agent **PVA MAX** (coloured)

1. Description

PVA MAX is a water-based Polyvinyl Alcohol coating comprised 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. PVA MAX 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.

PVA MAX will not shrink or pull away from corners or curved surfaces. Film parts easily from mold surface and is readily dissolved from molded parts and spray equipment with water. An occasional coating of paste is suggested for most mold surfaces prior to application of PVA MAX.

2. Use

PVA MAX, water/alcohol-based polyvinyl alcohol mold release agent, forms a barrier between parts and mold surfaces that are still curing (blue or recently reconditioned molds can be reactive). PVA MAX, the original green parting film, is resistant to solvents and styrene yet is water soluble. Protects against mold hang ups with polyester and vinylester resins; also used with epoxy and urethane resins. PVA MAX is most commonly applied over mold release wax although some users find success by adding wax over the PVA film (giving a second part cycle before replacing PVA.) PVA MAX can also be used as a surface cure agent during gel coat repairs (locks out moisture in the air that inhibits resin cure). Now improved for easier lay out, PVA MAX allows application by brush, roller, sponge or cloth as well as excellent spray characteristics. Available in blue or clear (water-white). Packaged in 1-gallon, 5-gallon and 55-gallon container sizes.

2.1 Working instructions

Porous molds must first be sealed with lacquer or similar coating. A good surface on plaster may be obtained with automobile type primer-sealers and lacquers. Mold should be thoroughly dry and free of other parting agents. Cleaning with fine steel wool or sandpaper will not affect the high gloss obtained with PVA MAX although deep scratches or pits will fill with solution and increase drying time.

Apply wax. Using a clean dry cloth, apply a small amount to mold surface in a thin even coat. On larger molds or plugs work on smaller sections at a time or have second operator follow to polish. Power buffer equipped with a terry cloth or lamb's wool pad will reduce labor time on larger molds. Surface should be buffed to a glossy finish.

Complete surface coverage is more important than a thick film of wax. In order to insure complete coverage, repeat application and polishing process 3 times for initializing new or reconditioned molds or plugs.

PVA MAX is ready to use as received and should not be diluted. Apply with a spraygun or brush: when using spraygun adjust air pressure to approximately 60-90 psi at the gun. Normal spraying distance is 12-18 inches.

On new or unseasoned molds, apply two coats of PVA MAX to surface and allow each coat to dry completely before proceeding. On seasoned mold, apply one coat of PVA MAX. Do not begin molding until surface is completely dry. Drying time is approximately 30-60 minutes per coat with normal application. Dry film thickness should be at least 2-4 mils (about the thickness of an industrial-type trash bag) on new or reconditioned molds

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(1-2 mils on seasoned molds). PVA MAX will attain a white foamy appearance when sprayed but will dry to a clear coat. Film should not sag or contain runs when applied.

Make certain that PVA MAX is completely dry before proceeding with molding process. 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 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. A jet of air between the part and 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 CO2 extinguisher, can aid in freeing very rigid parts that cannot be flexed.

2.2 Technical parameters

Form	Liquid
Appearance	Blue
Odour	Alkalic
Dissolving agent	mixture of alcohole and water
Aplication	Apply by sponge and let it dry
Solulibility/Dilutability	Water/alcohols/glycerole
Working temperature	15 – 120°C
Vapour pressure (20°C)	< 1150 mbar
Occupational	Do not smoke
Protective equipment	Not neccesary

3. Storage and package

Package: the PVA MAX is filled in packages as agreed ahead. Package of 0,1 – 25 l.

Storage temperature: + 15°C max. 35°C
Shelf life: 6 months in sealed containers
Safety during work: see MSDS