

Release Agent R4

Blue glossy PVA release agent

Release Agent R4 is a liquid solution of polyvinyl alcohol (PVA) in ethyl alcohol. Release Agent R4 is intended for use as a mould release/parting agent for fabricating mouldings in polyester gelcoat and layup resins in GRP construction.

Product Data

Property	Typical Value
Appearance	Blue Liquid
Solids (1hour @ 105°C)	7.4 – 8.0%
Flash Point	< 21°C
Density @ 25°C	0.92 – 0.96
Stability @ 0°C	Still liquid after 24 hours
Drying Time @ 25°C	Approx. 1 hour
Finish	Smooth and even
Gloss	Glossy

Application

The mould surface must first be thoroughly waxed and polished with a silicone-free wax, ensuring that no areas are left unwaxed as this will result in sticking of the moulding during release.

During PVA application care must be taken not to flood the mould surface, as this will cause variation in finish over the area coated leading to a similar finish variation in the moulding.

The best results are obtained by using as fine a spray as possible, and a high air pressure of between 80 and 90psi. A low output of PVA and a normal spraying distance of 300 – 400 mm should be observed. One thin coat of PVA should be applied via a continuous multiple pass technique to give a wet film thickness of 50 – 150 microns. To achieve best results when using Release Agent R4 it is recommended that it be spray applied however, Release Agent R4 can also be applied by sponge or soft brush.

The spray gun can be washed out after use with water and flushed through with solvent to remove the residual water.

The PVA must be allowed to dry completely before gelcoat or resin application to the mould begins. Cold, damp conditions will retard the drying rate. The drying rate should not be hastened by simple expedient of turning a warm air fan over the sprayed mould; this will cause the wet PVA to skin over on the exposed film surface whilst leaving moist solution trapped underneath. Preferably, the mould itself should be pre-warmed in adverse conditions.

A PVA film is strongly recommended on new tooling for it's insurance value in case waxing has been insufficient.

Once the moulding has been constructed on the mould and has cured, the PVA film may be dissolved to float the moulding free of the mould by working warm water down into the interface between the moulding and mould.

PVA may be removed from both mould and mouldings by washing them with water or methylated spirit where moulds have become stained.

Storage

Store in a cool, dry place out of direct sunlight.

Packaging

1Kg kits.

Further Information

Our technical advice, whether verbal, or in writing is given in good faith, but without warranty – this also applies where proprietary rights of third parties are involved. It does not release you from the obligation to test the products supplied by us as to their suitability for the intended process and use.

Before using any of our products, users should familiarise themselves with the relevant Technical and MSDS provided by Alchemie Ltd.

Alchemie Limited

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- Electrical encapsulation
- Rapid Prototyping
- Prototypes
- Casting
- Gel Coating
- Laminating
- Model Making
- Master Models
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