

# Futuran<sup>®</sup> Two-pack PUR Varnish FU 9, 0

## Product description

Futuran<sup>®</sup> Two-pack PUR Varnish FU is the new VOC-compliant solvent-based varnish made by Zweihorn<sup>®</sup>, for which a patent is applied for. It is finally possible now, even after the 2<sup>nd</sup> stage of ChemVOCFarbV, which has been sharpened again (since 01.01.2010), to coat even firmly installed components in the accustomed solvent-based quality and appearance. In the recipe of the varnish, a part of the solvent has been replaced by water with the help of special additives. The requested properties such as drying, sandability, good application properties even at lower temperature, outstanding mechanical and chemical resistance and low blocking tendency are retained. The product is lightfast and is therefore also suitable for overpainting of Wigranit<sup>®</sup> Novacolor and Variocryl<sup>®</sup> Color paints.

#### Range of application

Futuran<sup>®</sup> Two-pack PUR Varnish FU is suitable for the finishing of all interior objects. Due to its outstanding chemical and mechanical resistance it is also suitable for very strongly stressed surfaces, e.g. in offices, kitchens, bathrooms, restaurants, etc.

## Substrates

All common woods and wood materials.

Hardboard and MDF boards in wet cells, as well as some woods rich in resin or other ingredients, such as pine, teak or wenge should first be insulated with Plastic Varnish Two-pack PUR Insulating Varnish S 7000. All Zweihorn stains<sup>®</sup> (with the exception of Wax Stain) can be used.

## Preparation

In case of raw wood surfaces, carry out wood sanding in several steps (120/150/ perhaps 180 grit paper) and dust well. Do not sand stained surfaces.

Gl	oss	leve	s
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Product number Gloss level Measuring value accord. to DIN 67530 at 60°	FU 9 silk-lustre approx. 20	FU 0 matt approx. 10
Hardening		
Hardener:		FH
Mixing ratio (varnish/hardener)		10:1
Pot life		approx. 4 hours at 20°C, 65% rel. humidity

## Thinner

Futuran<sup>®</sup> Thinner FV, if required.

The recommended quantity to be added is up to 20%.

The VOC value is not affected by adding thinner so that it is possible to add greater quantities, too. Mixing of Futuran<sup>®</sup> Thinner FV must be made very accurately. However, droplets of the thinner which might be visible in the varnish mixture will not affect further processing of Futuran<sup>®</sup>.

We recommend using Zweihorn<sup>®</sup> Universal Cleanser for the cleaning of the varnishing devices.



### Application

## Shake or stir well before use.

Carefully mix Futuran<sup>®</sup> Two-pack PUR Varnish FU and Futuran<sup>®</sup> Hardener FH. Add Futuran<sup>®</sup> Thinner FV, if required. The mixture is first applied as primer, and, after drying and intermediate sanding (240-grit paper) as a finishing coat. Sanding with sanding machines after one night only. Carefully remove the sanding dust after intermediate sanding. Futuran<sup>®</sup> Two-pack PUR Varnish FU is also suitable as final coat on the paints Wigranit<sup>®</sup> Novacolor WNC/Colour and Variocryl<sup>®</sup> Color VCC/Colour hardened. These paints can be overpainted after a drying time of 3 to 8 hours max., without intermediate sanding, in order to ensure sufficient adhesion of the varnish. If final coating can be made at a later time only, the paint must be slightly sanded (P400) before. This, however, may cause colour variations.

#### **Application methods**

	Spraying	
	High/Low pressure	Airless / Airmix
Spray pressure (bar)	1,5 - 3	110 - 130
Nozzle size (mm)	1,8 - 2,0	0,25 - 0,28
Thinner to be added (%)	as required	as required
Processing viscosity DIN 4 mm (sec.)	approx. 35	approx. 35
Coverage per		
application (g/m <sup>2</sup> )	100 - 150	100 - 150
Yield (m²/l)	5 - 8	5 - 8

#### Drying time (at room temperature of 20°C and 65% relative humidity)

dust dry	touch dry	sandable	stackable/moveable
approx. 40 min.	approx. 2 hours	from approx. 4 hours	overnight

#### Aftertreatment

After prior sanding and dusting, Futuran<sup>®</sup> Two-pack PUR Varnish FU can be worked over at any time with the same material.

For cleaning and care we recommend using Furniture Care MPF. Please see the separate Technical Data Sheet for this product.

## Product data

Batch sizes FU	5 I, 20 I
Batch sizes Futuran <sup>®</sup> Hardener FH	0.5 I, 2 I
Batch sizes Futuran <sup>®</sup> Thinner FV	1 I, 5 I
Viscosity at delivery DIN 4 mm	48 ± 2 sec.
Shelf life in unopened original batches	approx. 2 years

For further information, please see the Safety Data Sheet according to 91/155/EEC, which can be downloaded from our Internet site "www.zweihorn.com" or requested from us.



#### **Special notes**

- Whenever polyurethane (PUR) material is to be applied as a coating, sand surface and remove dust thoroughly just before commencing with further treatment to guarantee perfect bonding.
- Do not process and dry PUR varnishes below 15°C.
- When using PUR hardeners always follow the safety instructions on the labels.
- PUR hardener may be stored in unopened original batches and at a cool and dry place for a maximum of 1 year approx
- Futuran<sup>®</sup> Two-pack PUR Varnish FU may also be applied on bleached wood (peroxide-resistant).
- When using Airless and Airmix systems with high-solids varnishes and paints, such as the varnishes of the Futuran<sup>®</sup> series, cloudy and/or streaky surface irregularities may occur under unfavourable conditions, which will be more striking in the case of dark wooden substrates or dark colours. This can be avoided by using a high-pressure spray gun (e.g. SATAjet 3000 RP<sup>™</sup> or similar) or a double diaphragm pump (e.g. SATA<sup>®</sup> vario top spray<sup>™</sup> or similar).

#### Meets the following test standards

- Chemical exposure of furniture surfaces according to DIN 68861/1B.
- EN 71-3 Free from soluble heavy metals (CE approval)\*
- Hardly inflammable according to DIN 4102/B1 with ABP approval on hardly inflammable B1-tested wooden particle boards, even veneered.\*
- Tox Control The seal for low-emission paint\*
- \* applied for

Please follow the relevant test certificates for our products, which can be downloaded from our Internet site "www.zweihorn.com" or requested from us.

Zweihorn<sup>®</sup> products are produced for the professional user, who has a basic knowledge of the use and the application of stains, varnishes, glazes and glues. The user information for our qualities given in the leaflets should be regarded as non-binding recommendations. They are based on our test series and experiences and should facilitate and promote the work of our clients. Any adjustment to the individual working conditions, which might be possible, lies within your responsibility. If in any doubt, our material experts as well as our application and laboratory technicians will try to help you as best as they can. We guarantee of course the impeccable quality of our products based on our General Sales and Delivery Conditions. The use of the final product lies entirely within the responsibility of the buyer. As long as we have not guaranteed in writing specific characteristics and suitability of the products for a contractually agreed purpose, any advice or information given regarding the application, even if the advice or information is given to the best of our knowledge, will be non-binding. Nor does it relieve the buyer, either from his own inspection, and if need be through a trial processing. Furthermore, we are only liable according to our General Conditions for advice either given or rejected, which does not refer to the characteristics and use of the delivered product.

Applicable is the current Technical Data Sheet, which can be downloaded under www.zweihorn.com. Previous technical data sheets are voided with the issue of a new version.

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