Technical Data Sheet

Duocryl 2K-PUR Top-Wasserklarlack DC-T 8, 9, 0













Product description

Duocryl 2K-PUR Top-Wasserklarlack DC-T is a highperformance product of the latest generation of waterbased clear varnishes, which, for the first time, exceeds the performance of two-pack solvent-based varnishes with regard to chemical and mechanical resistance. Being a real two-pack PUR varnish system, it achieves optimum values concerning chemical resistance, scratch resistance and abrasion. Due to its extreme hardness, its PVC resistance and its outstanding cream and grease resistance, it is the top product for high-quality interior applications. Duocryl 2K-PUR Top-Wasser-klarlack DC-T is extremely lightfast and can therefore be used for overpainting of Variocryl® Color VCC/colour. Because of its sparkle, its transparency and the good grain emphasising properties, it is also suitable for noble wood such as cherrywood, walnut, etc.

Range of application

Duocryl 2K-PUR Top-Wasserklarlack DC-T is very well suitable for open- and closed-pore, VOC-conforming varnishing of highly stressed interior wood and woodbased material. Due to its excellent mechanical and chemical resistance it is particularly suitable for varnished surfaces in areas such as schools, restaurants, hotels, chemist's shops, pharmacies and for shop fittings, wet-process rooms like bathroom or kitchen, as well as for highly stressed stairs.

Surfaces

All common wood and wood materials. Hardboard and MDF boards in wet-process rooms, as well as wood rich in resin or other ingredients, such as pine, teak or wenge, must first be primed with Duocryl ZK-PUR Wasser Isoliergrund DC-I. Please see the separate Technical Data Sheet. All water-based Zweihorn® paints (Variocryl® Color VCC/colour) and all Zweihorn® stains, with the exception of wax stain, can be used.

Preparation

For raw wood surfaces a graduated sanding must be carried out (120/150/ possibly180 grit paper). Dust well. The finer the wood sanding, the slighter the roughening. In the case of strongly roughening wood previous watering is recommended. Do not sand stained surfaces.

Gloss levels				
DC-T8	DC-T 9	DC-T 0		
silk	silk-lustre	matt		
approx.	approx.	approx.		
40	20	10		
	silk approx.	silk silk-lustre approx.		

Hardening		
Hardener	PUR-Wasserlackhärter PWH 3200	
Mixing ratio (lacquer/hardener)	5:1	
	approx. 4 h at 20 °C, 65 % relative humidity of air	

Caution: The hardener must be intensively and immediately mixed with the product.

When the hardener is added, the viscosity is increased. After the hardener has been added and thoroughly mixed, Variocryl® Optimizer or tap water must be added to adjust the product to spraying viscosity. To achieve the optimum varnishing result, do not exceed the pot life.

Thinner

Only after being mixed thoroughly with the hardener! 10-20 % of Variocryl® Optimizer or tap water.

Application

Shake or stir well before use!

When changing the spraying equipment from solvent-based products to water-based varnishes, the spraying equipment must be first flushed with Zweihorn® Universalreiniger UR and water. Duocryl 2K-PUR Top-Wasserklarlack DC-T may only be applied after it has been mixed with the hardener. After drying of the primer coat carry out intermediate sanding with a sanding paper suitable for water-based paint (e.g. 280 grit paper) and dust well. Then Duocryl 2K-PUR Top-Wasserklarlack DC-T is applied again. For thinning we recommend using Variocryl® Optimizer instead of tap water. By doing so, the surface elegance, especially in the area of edges and profiles is shortened, too. Processing conditions: 15-25 °C temperature and 30-65 % relative humidity.

Application methods			
	Spraying		Roller/
	High/	Airless/	Brush
	Low	Airmix	
	pressure		
Spray press. (bar)	1.5-3.0	110-130	-
Nozzle size (mm)	1.8-2.0	0.25-0.33	_
Water added (%)	20	10-20	20
Processing viscosity DIN 4 mm (sec.)	approx. 40	approx. 40-50	approx. 40
Coverage per application (g/m²)	100-140	100-140	80 - 120
Yield incl. overspray (m²/l)	5-7	5-7	8-12

Drying time			
(at 20°C room temperature,			
65 % relative humidity	55 % relative humidity of air)		
dust-dry	approx. 30 min.		
touch-dry	approx. 1 h		
sandable	approx. 4-5 h		
transportable	overnight		

The drying time strongly depends on the quantity applied, the temperature, air humidity and air movement. High application quantity and air humidity has a negative effect on the drying process. Higher temperature and air blast has a positive effect.

Aftertreatment

Duocryl 2K-PUR Top-Wasserklarlack DC-T can be worked over at any time with the same material after prior sanding and dusting.

Product data	
Batch sizes DC-T	5 I, 25 I
Batch sizes Härter PWH 3200	0.5 l, 2.5 l
Viscos. at deliv. DIN 4 mm	approx. 40 sec.
Shelf life in unopened original batches	approx. 1 year

VOC directive

EC limit value for this product (cat. A/e): 150 g/l (2007) / 130 g/l (2010). This product contains max. 74 g/l VOC.

For further information see the label and the Safety Data Sheet according to 91/155/EWG, which you can find on our website www.zweihorn.com or which you can request from us.

Special notes

- After use, immediately clean the working equipment with water.
- When changing from water-based varnish to solvent containing systems thoroughly rinse the spraying equipment with water and then with Universalreiniger UR.
- ➤ Duocryl 2K-PUR Top-Wasserklarlack DC-T is PVC resistant. Due to the huge number of plastic materials being on the market, softening of the paint coat in case of permanent contact can never be excluded. Take care not to use unsuitable profile packings. Please follow the instructions of the profile manufacturer.
- PUR hardeners are sensitive to moisture.
 Always store the hardener in tightly closed batches.
- ▶ Pay attention to the Safety Instruction appearing on the label whenever you handle PUR hardeners.
- PUR hardeners should be stored under cool and dry conditions for not longer than approx. one year in the closed original batch.
- ▶ Duocryl 2K-PUR Top-Wasserklarlack DC-T may also be applied on bleached wood (peroxide-resistant).
- Some water stains might "bleed out" during coating with water-based varnishes. For that reason, always make a staining and varnishing test.
- Do not process under 15°C.
- Material is frost sensitive do not store and transport under 5°C.
- All processing parameters apply to normal conditions (20°C, 65% relative humidity of air). Deviations may cause deterioration of the results.
- ▶ Always keep the containers closed; protect the contents against dehydration.
- In case of skinning, remove the skin through filtration prior to the application (e.g. through a nylon mesh).
- Caution: The product must not be drained into the sewage system.

$\label{eq:meets} \mbox{Meets the following test standards:}$



Chemical exposure of furniture surfaces according to DIN 68861/1B and ÖNORM EN 12720 B1



EN 71-3 Free from soluble heavy metals (CE approval)



DIN 53160 Part 1 and Part 2 Saliva and sweat proof (CE approval)



Flame resistant according to DIN 4102/B1 on B1-tested particle board, also veneered



Requirements to the surfaces of kitchen furniture according to DIN 68930 regarding the resistance under changing climatic conditions



Flame resistant according to IMO-Resolution A 653, USCG approval

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