

FOLCO® - LIT D3 W91

General Information

Type of product	FOLCO® - LIT D3 W91 is an unfilled PVAc-based adhesive with cross linkable groups.
Field of application	Thermo-laminating of decorative finish foils; surface bonding of e.g. HPL/CPL in short cycle presses; carcass and assembly gluing; bonding of joints in boards and block gluing of softwood and chipboard as well as hardwood (testing is required in advance).
Properties	Good water resistance: durability class D3 according to DIN EN 204; mixed with FOLCO® - LIT Härter 300 durability class D4 according to DIN EN 204 is met. Good heat resistance: $\geq 7 \text{ N/mm}^2$ according to DIN EN 14257 – WATT 91. FOLCO® - LIT D3 W91 achieves a high final strength with short pressing time, especially under temperature.

Characteristics

Viscosity (on the day of manufacture)	approx. 12.000 ± 2.000	mPa·s	(Brookfield DVII, 20 °C, Sp. 6, 20 Upm.)
Viscosity after adding hardener	approx. 9500	mPa·s	
pH-value	approx. 3		

Further properties

Min. film forming temperature (MFFT)	ca. + 6	°C
(Dispersion-) density	ca. 1,08	g/cm ³
Pot life (mixture with hardener)	ca. 24	h
Open time at 150 g/m ²	max. 8 - 12	min.

Instructions for use

Modification Hardener	Durability class D4 can be achieved by adding 5 parts by weight FOLCO® - LIT Härter 300 on 100 parts by weight of FOLCO® - LIT D3 W91 . The mixing time should be at least 2 minutes to guarantee a homogeneous mixture. Powered mixing arms or baskets are best suitable for mixing the components.
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Wood preparation

Work pieces should be properly planed and free of dust and grease. Tolerances cause prolonged setting times and less mechanical strength.

Use

Among others, the temperature, humidity and absorption of the materials, the coating weight and the tension within the material have different influence on the open time, the setting time and the pressing time. Heat accelerates the setting procedure and shortens the open time.

For good results we recommend the following working conditions:

Room-, material- and adhesive temperature	18 – 22	°C
Wood moisture (should correlate with the later wood moisture)		
Interior use: approx.	6 – 12	%
Exterior use: approx.	11 - 15	%
Relative air humidity	60 – 70	%
Coating weight:		
for surface bonding	80 – 150	g/m ²
for Thermo-laminating	50 - 80	g/m ²
for assembly	100 – 180	g/m ²
Press pressure for tensionless work pieces	0,1 – 1	N/mm ²
Minimum pressing time:		
Surface gluing (HPL / chipboards) with 70°C	ca. 1	min.
with 20°C	30 – 40	min.
decorative finish foil (short cycle presses)	5 – 10	sec.
Assembly gluing	8 – 15	min.

FOLCO® - LIT D3 W91 is applied with the common application tools on one or both sides. The coating weight depends on the absorption and the surface conditions of the materials to be bonded. Do not apply below +10°C (room and material temperature).

Within the open time the parts are to be joined and pressed.

The compatibility with other adhesives has to be checked before mixing.

The final water resistance is built up after approx. 7 days.

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| Wood discoloration | Usually FOLCO® - LIT D3 W91 does not lead to wood discoloration. Because of the varied nature of wood components unpredictable discoloration may in some cases appear. E.g. iron together with the tannin in wood may cause discoloration. We recommend to do your own trials. |
| Cleaning | Fresh and not yet dried adhesive can be removed with water immediately after use. |

Additional Advices

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| Safety advices | An EC health and safety data sheet for FOLCO® - LIT D3 W91 is available and has to be considered before handling, storage or use of the product. |
| Storage | In original containers under suitable conditions FOLCO® - LIT D3 W91 can be stored for min. 12 months. The material should be stored cool and free from frost. A storage temperature of above 25° C minimizes considerably the storability of the product. The characteristics which are necessary for the products' allowance are checked by our quality control department during production and before delivery. Dependent on the storage temperature and the time the values can change and fall below or exceed the indicated limits. The viscosity of FOLCO® - LIT D3 W91 may increase after a longer storage time. In this case we recommend to stir the product before use. However, this does not influence the adhesion properties of the product. |

Last change **11-13-2006**

This data sheet replaces all former technical information .

Instructions on the application methods of our products are based on comprehensive development work and years of experience. They are provided to the best of our knowledge. The most diversified requirements to the object under extremely varying conditions require a suitability test by the processor for the corresponding application. We reserve the right to introduce modifications for the purpose of technical progress or an improvement of our products. The agreed-upon characteristics of the product are finally detailed in this technical data sheet. All additional agreements concerning the characteristics must be made in writing. This applies in particular to products' suitability for any specific application.