

TYPE

Flat, moisture curing one-component polyurethane resin

FORM OF DELIVERY (f.o.d.)

40 % in solvent mixture (40LG)

SPECIAL PROPERTIES AND USE

Contains flattening agent.
Rapid curing.
Good abrasion resistance.
Excellent resistance to chemicals.

For floor sealers, wood paints and concrete impregnation sealers.

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity (100 1/s; 23 °C)	[mPa.s]	160 - 370
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Iodine Colour Number DIN 6162

iodine colour number		<= 5
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Non-Volatile Matter DIN 55671

non-volatile matter (120 °C; 5 min)	[%]	38,5 - 41,5
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Not continually determined:

Isocyanate Content DIN EN ISO 11909

content	[%]	2 - 4
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Non-Volatile Matter DIN EN ISO 3251

non-volatile matter (1 h; 125 °C; 1 g)	[%]	38,5 - 41,5
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Density (Liquids) DIN EN ISO 2811-2

density approx. (20 °C)	[g/cm ³]	0,98
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Flash Point DIN EN ISO 1523

flash point approx.	[°C]	30
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SUGGESTED USES

Owing to its high abrasion resistance, Beckocoat VPU 4204 is an ideal binder for wooden floor sealings and concrete impregnation, e. g. in bowling alleys, dancing halls, gymnasium and schools. Beckocoat VPU 4204 is used as sole binder. The degree of flatness or brilliance can be varied to desire by combining it with Beckocoat PU 428. For special outlets it is possible to mix Beckocoat VPU 4204 with suitable colouring pastes shortly before application (concrete paints).

PROCESSING

Beckocoat VPU 4204/40LG can only be used in diluted form by brush, roller or spray gun e. g. for parquet sealing coats. The application viscosity of about 20 s should be adjusted especially for low temperatures with a mixture of xylene/methoxypropyl acetate 1 : 1. The equipment should be cleaned with solvents immediately after use. The compatibility with other binders is limited. The degree of matting can be adapted in combination with Beckocoat PU 428.

FILM PROPERTIES

Beckocoat VPU 4204 cures by interaction with air humidity. The curing rate of the films depends upon film thickness, temperature and degree of humidity. For films of about 120 µm of wet film thickness on glass plates the following curing schedule was recorded at 21 - 22 °C and 45 - 50 % of relative air humidity: dust-free after about 25 min, tack-free after about 60 min.

Films of Beckocoat VPU 4204 on principle recoatability has to be checked. Usually recoating is possible after 6 - 8 hours (23 °C). Between every layer sanding is recommended. At low temperatures (< 15 °C) blisters may occur. The various layers should not be allowed to dry for more than 24 hours in order to secure intercoat adhesion. After longer periods or to renovate older films, sanding is recommended to secure better adhesion.

STORAGE

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 365 days.

SPECIAL INDICATIONS

Discharge and package

Since one-component polyurethane resins cure by air humidity, it should be made sure that only dry and dense containers are used. Experience showed tinplate containers a suitable material. Glass should not be used, traces of alkali might cause gelation, and polyethylene containers will allow the solvents to diffuse.

As thinner, only solvents absolutely free from water should be used.

Artificially bleached or with acid-curing paints coated woodwork may discolour the paint film. In some cases, if for example Beckocoat is applied on floors, also in rooms with unfavourably formulated freshly applied wall fillers and emulsion paints, discolouration might be observed. Pre-tests are recommended.

Roller coating can lead to differences in the degree of matting at unfavourable conditions.

Also the variety of substrates and their condition (old coatings, cleaning, pre-treatment, etc.) requires in any case a pre-testing in order to secure the durability of the coating.