

## DANCOLL® 405

### DESCRIPTION

DANCOLL®405 is an aqueous, aliphatic, anionic based polyurethane dispersion with high crystallization tendency. DANCOLL®405 is already adjusted application ready in the viscosity and can be processed 1- and 2-component. DANCOLL®405 is suitable as bonding agent and impregnation dispersion for textiles, especially such, which are coated later with thermoplastic polyurethanes (TPU) and PVC. Dried films of DANCOLL®405 are characterized by good reactivation properties and high thermostability. Depending on the request, DANCOLL®405 can be used 1- or 2-component. For the 2-component processing DANCURE® 101 is added as crosslinker.

### PRODUCT CHARACTERISTIC

	Values	Method
Type	Polyurethane dispersion, anionic, aliphatic	
Aspect	Milky-white liquid	
Viscosity	4.000 – 5.000 mPa.s	BROOKFIELD RVT at 20 °C
Solid content	40,0 ± 2,0 %	DIN 53.189
Specific weight of dispersion	1,08 g/cm <sup>3</sup> at 20 °C	DIN 51.757
Specific weight of polymer content	1,21 g/cm <sup>3</sup> at 20 °C	DIN 51.757
Particle size	100 - 300 nm	
pH value	7,0 - 9,5	DIN 53.785
Minimum film formation temperature	5 °C	DIN 53.787
Crosslink ability	Crosslinkable with aqueous emulsifiable isocyanates and polyfunctional aziridine or carbodiimides	

### MECHANICAL VALUES

	Values	Method
Micro hardness	85 - 87 Shore A	DIN 53.505
Thermoplasticity	Low	
Softening range	65 – 85 °C	KOFLER
Hydrolysis resistance	Good	
Electrolyte resistance	Good	
UV-resistance	Very good, lightfast ness 7	DIN 54.004
Glass transition temperature (Tg)	-38 °C	



## APPLICATION

DANCOLL® 405 serves as application ready bonding agent or impregnation primer for the impregnation and adhesive equipment of textile fabrics and non-woven fabrics. DANCOLL®405 is also suitable for adhesive applications for the bonding of different thermoplastic polyurethane and PVC foils with wooden composites etc. DANCOLL®405 is also used as deep-drawing adhesive and press lamination adhesive. For the processing as 2-component adhesive, we recommend for the crosslinking, the crosslinking with the aqueous emulsifiable isocyanate DANCURE® 101.

## PROCESSING

DANCOLL® 405 is adjusted processable regarding the viscosity. For dilution water can be used.

## COMPATIBILITY

For special applications DANCOLL® 405 can be blended with all DANCOLL® polyurethane dispersions. The compatibility with acrylate and PVAc dispersion is under retention of the given pH-value limits possible and fillers can be added. However, we recommend corresponding pre-tests.

## STORAGE

This product can be stored for at least 6 months after date of dispatch. Dispersions are sensitive to frost and should be stored and transported at temperatures above 4 °C only.

## PRODUCT SAFETY

In accordance with the hazardous goods regulations and the EEC safety guidelines valid right now, this product is not subject to being marked as a hazardous product. The residual content of NMP (N-methyl-2-pyrrolidone) is below 1 % (m/m).

\* For further details, please refer to our Safety Data Sheet.

## PACKAGING

120 kg-PE-drums on 600 kg (net) EUR-pallets.

1000 kg one-way containers and road tankers.



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