

DANCOLL® 400

DESCRIPTION

DANCOLL®400 is an aqueous, anionic, strong crystallizing PU dispersion for the one and 2-component application. This dispersion acts as raw material for environmentally friendly adhesives coating masses. Adhesive films, produced with DANCOLL® 400 distinguish themselves through its good reactivation properties and high thermobond stability. Adhesive composites produced with adhesives based on DANCOLL®400 is very good heat resistant.

PRODUCT CHARACTERISTIC

	Values	Method
Type	Polyester polyurethane dispersion, anionic, aliphatic	
Aspect	Milky and white liquid	
Viscosity	400 - 800 mPa.s	BROOKFIELD RVT at 20 °C
Solid content	40,0 ± 2,0 %	DIN 53.189
Specific weight of dispersion	1,07 g/cm ³ at 20 °C	DIN 51.757
Specific weight of polymer content	1,20 g/cm ³ at 20 °C	DIN 51.757
Particle size	100 - 300 nm	
pH value	6,0 - 9,0	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	88 - 93 Shore A	DIN 53.505
Thermoplasticity	Low	
Softening range	70 – 80 °C	KOFLER
Melting range	220 - 240 °C (not cross linked); > 260 °C (cross linked)	KOFLER
Hydrolysis resistance	Very good	
Electrolyte resistance	Good	
UV-resistance	Very good, lightfast ness 7	DIN 54.004
Glass transition temperature (Tg)	-40 °C	

The values mentioned above refer to transparent films of 0,1 mm strength, made of DANCOLL® 400.



APPLICATION

DANCOLL® 400 serves as basic raw material for the production of one component and two component adhesives. Adhesives, produced with DANCOLL® 400, are best suitable for:

- Sheathing of profiles and casings
- Lamination of thermoplastic films by means of wood materials as for example membrane presses
- Thermoforming and press lamination for the area of automotive
- Lamination of textiles, wood, paper, PVC and a lot of other materials
- Fixation of shoe soles and assembling of shoe uppers
- Environmentally friendly glues for offices and household

For the processing at the 2- component process we would recommend the crosslinking based on aqueous, dispersible isocyanates based on polyfunctional aziridine or carbodiimides or melamine formaldehyde.

PROCESSING

The dispersion has excellent shear stability with regard to compound production. In the pumping, mixing and filtering processes, neither coagulation nor a viscosity increase was observed. For the compound production, we recommend the use of infinitely variable mixing units made of a stainless material.

COMPATIBILITY

DANCOLL® 400 can be blended with any PUR dispersion of the DANCOLL®, MORCHEM and NEWBOND range. By blending the specific properties of the adhesives can be adjusted well. For the adjustment of the viscosity we would recommend commercially available PUR thickeners. In practise it is added 1 % until 3 % of the thickener to the dispersion DANCOLL® 400 and at the same time it will be adjusted the pH value of 8 by means of ammoniac or sodium hydroxide solution. It can be also added Acrylate resp. PVAc dispersions in corresponding ratios. It must be paid attention that the pH-value of the blendings is not below 5,5 as in that case the product would be unstable. At a pH value between 4-8 it is given a good compatibility with neutral or anionic stabilizing CR, EVA, NBR, SAN, phenol resin and terpene resin dispersions. Suitable defoamer, wetting agents, thixotroping agents and extenders can be added. We recommend to make corresponding prior 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.



DANQUINSA
GMBH

STÖRRENSTR.30
72135 DETTENHAUSEN
GERMANY

: +49 (0)7157 5225-0

: +49 (0)7157 5225-22

: info@danquinsa.com

WWW.DANQUINSA.COM

Post office box 147
72133 DETTENHAUSEN
GERMANY

STAND 07/2022