

DANTHANE® I 25K-POWDER

DESCRIPTION

DANTHANE® 125K-Powder is an aromatic, thermoplastic polyurethane (TPU) powder based on polyester. This transparent TPU powder is best suitable for sinter coating and dot point coating of textiles, non-woven material and other supporting materials. With DANTHANE® 125K-Powder it can be produced medium-hard film coatings which show very good cold and abrasion resistance.

PRODUCT CHARACTERISTIC

	Values	Method
Aspect	Transparent, good pourable powder	
Powder grit size	50 – 500 µ	
Density	1,20 g/cm ³ at 20 °C	DIN 53.479
Shore hardness	85 A / 36 D	DIN 53.505
Melt Flow Index (MFI)	210 °C/10,0 kg/10 min.: 65 – 95 g	
Moisture content	< 0,5 %	
Melting range	135 – 145 °C	KOFLER
Softening range	135 – 145 °C	KOFLER
Hydrolysis resistance	Very good	
Chemical resistance	Good resistant against oil, fuel, ester, ketone and Hydrogen chloride.	

MECHANICAL VALUES

	Values	Method
Tear strength	30 MPa	DIN 53.504
Elongation at break	500 %	DIN 53.504
Modulus 20 % elongation	3,0 MPa	DIN 53.504
Modulus 100 % elongation	6,0 MPa	DIN 53.504
Modulus 300 % elongation	9,0 MPa	DIN 53.504
Tear propagation resistance	70 kN/m	DIN 53.515
Abrasion loss	25 mm ³	DIN 53.516
Resilience	40 %	DIN 53.512
Compression set (70 hrs./23 °C)	25 %	DIN 53.517
Compression set (24 hrs./70 °C)	45 %	DIN 53.517
Glass transition temperature (T _g) (DSC, 10 °C/min.)	-27,0 °C	DIN 51.513
Tear strength after 21 days (Immersion in water at 80°C)	30 – 35 MPa	DIN 53.504
Elongation at break after 21 days (Immersion in water at 80°C)	450 – 500 %	DIN 53.504



APPLICATION

DANTHANE® 125K-Powder can be used at different powder coatings of textiles and non woven materials. This transparent type is very often used as top coat at the sinter coating. DANTHANE® 125K-Powder is also used at the coating of transport and conveyor belts and also at thermal sealable textile coatings. Textiles or other materials, which are coated with this powder, can be adhered very good to other materials.

PROCESSING

DANTHANE® 125K-Powder will be delivered in the standard powder grit size of 50-500 µ. In the case that you need a smaller grit size, please contact us. We recommend DANTHANE® 125K-Powder for:

- sinter coating
- dot point coating
- double dot point coating
- powder dot point coating
- powder impregnation
- flatbed and transfer calender lamination

At the coating of textiles we want to indicate that we also deliver the corresponding impregnations and primers. Concerning this we refer to the DANCOLL® product range.

COMPATIBILITY

DANTHANE® 125K-Powder can be modified with flow regulation agents and additive wax, respectively stearates. This TPU powder has also a good compatibility to PVC-coating raw materials and will be applied for this reason as PVC modifier.

STORAGE

If correctly stored in a dry and cool place in its original packing, this product can be stored for at least 6 months. The product needs to be protected from humidity.

PRODUCT SAFETY

DANTHANE® 125K-Powder is under normal hygienic processing conditions a harmless material. If larger quantities are being processed in the melt, vapour extraction must be ensured.

* For further information we refer to our Safety Data Sheet

PHYSIOLOGICAL CHARACTERISTICS

In its chemical constitution DANTHANE® 125K-Powder corresponds to the recommendations of BGA (Bundesgesundheitsamt) and FDA (FOOD and DRUG-ADMINISTRATION) for the production of food and utensils. The terms, that are mentioned in the recommendations, must be observed.

RECYCLING

Clean and uncontaminated waste of DANTHANE® 125K-Powder, which was separated from the substrate, may be grinded and reused as grinding material or may be added to new TPU-material.



PACKAGING


25 kg aluminium moisture proof multilayer bags, packed on pallets of 500 kg. Additionally, PE-lined cardboard bigbags of 700 kg net weight are available





DANQUINSA
GMBH

STÖRRENSTR.30
72135 DETTENHAUSEN
GERMANY

Post office box 147
72133 DETTENHAUSEN
GERMANY

 : +49 (0)7157 5225-0

 : +49 (0)7157 5225-22

 : info@danquinsa.com

WWW.DANQUINSA.COM

STAND 08/2022