



## DANPUR<sup>®</sup> 500

### DESCRIPTION

DANPUR<sup>®</sup> 500 is a 1-component, moisture-curing, solvent-free polyurethane binder. The curing time is approx. 4 to 6 hours at a temperature of 25 °C and a relative humidity of 50 %. When used at lower temperatures and humidity, the curing time is significantly extended. Therefore, the use of appropriate polyurethane catalysts may be necessary to shorten the curing time. The product should only be used at temperatures between 5 °C and 25 °C.

### PROPERTIES

	Value	Method
Color	Amber	
Viscosity	3.000 - 5.000 mPa.s	@ 25 °C
NCO content	7.5 – 11.0 %	
Spezific gravity	1.1	@ 25 °C
Non volatiles	92 -94 %	
Cure time	4 - 6	hours @ 25 °C and 50 % RH
Flash point	> 93 °C	
Tensile strength *	0.6 – 1.0 MPa	
Elongation *	80 – 120 %	

\* When cast at 20% with R30S EPDM

### APPLICATION

DANPUR<sup>®</sup> 500 is mainly used for recycled rubber composites, recycled granules, molded rubber products and for bonding various foam granules and foam recycled materials. It shows an excellent adhesion to most rubber granules and offers strong performance in terms of tensile strength and durability. DANPUR<sup>®</sup> 500 is also used in the production of rubber safety tiles, rubber mats and molded rubber products.

### PROCESSING

DANPUR<sup>®</sup> 500 is mixed homogeneously with the appropriate plastic granules, fiber materials and recycled granules using standard mixing devices/kneading mixers. It must be ensured a homogeneous final viscosity and good wetting of the added rubber materials and other additives. The recommended addition quantity of DANPUR<sup>®</sup> 500 is:

Addition quantity of resin for wet pour base layer: 10 %

Wear layer/top layer: 20 %

Addition quantity of resin for tile and mat production: 5 % - 25 %

The homogeneous mixture is placed in appropriate casting molds. The usual tundish temperature or mold temperature should be in the range of 100 °C to 150 °C. For example treatment with water vapor accelerates the curing time.



## COMPATIBILITY

DANPUR® 500 is well compatible with various rubber materials such as EPDM, nitrile rubber, flock materials made from polyether and polyester foams, cork, textile fibers and many other plastic-based granules and regranules. Compatibility with common polyurethane acceleration catalysts is also good.

## STORAGE

DANPUR® 500 should be stored dry, protected from the influence of moisture and at a temperature in the range of 5 °C – 35 °C. Opened containers must be closed tightly. If containers have already been opened, avoid contact with humidity as the polymer tends to form skin. The shelf life of originally sealed containers is 12 months if stored correctly.

## CLEANING

Mixing containers and stirring units must be cleaned immediately after the mixing has been completed. Common polyurethane cleaning agents and organic solvents are suitable for cleaning. In general, cleaning should take place before the product reacts completely due to humidity.

## PRODUCT SAFETY

Skin contact must be avoided when handling the polyurethane prepolymer. It is recommended to wear latex or PVC gloves. Soiled clothing must be removed and changed immediately. The processing regulations must be held, especially when processing larger quantities. Appropriate extraction of the reaction vapors must be ensured. Please find further information in the relevant EC safety data sheet.

## PACKAGING


DANPUR® 500 is delivered in 1.090 kg IBC containers, 220 kg steel drums and 25 kg plastic drums.




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