

PRELIMINARY PRODUCT INFORMATION

TYPE

Self-crosslinking, waterborne, aliphatic polyurethane-acrylic-hybrid-dispersion

FORM OF DELIVERY (f.o.d.)

37 % in water (37WA)

DEVELOPMENT PRODUCT

This product is serving for trial purposes only. Deviations which might occur during transfer into manufacturing in a commercial scale are possible and do not constitute any material defect.

Neutralization agent

0.75 % N,N-dimethylethanolamine, as salt

TENTATIVE PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity (25 1/s; 23 °C)	[mPa.s]	50 - 800
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pH-Value DIN ISO 976

pH-value (10 %)		7,5 - 8,5
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Non-Volatile Matter DIN EN ISO 3251

non-volatile matter (1 h; 125 °C; 1 g)	[%]	36 - 38
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Not continually determined:

Colour / Appearance VLN 250

colour		pale yellow
appearance		opaque

Density (Liquids) DIN EN ISO 2811-2

density approx. (20 °C)	[g/cm ³]	1,04
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Flash Point (Pensky-Martens) DIN EN ISO 2719

flash point approx.	[°C]	87
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SPECIAL PROPERTIES AND USE

Daotan TW 6473 is a self-crosslinking, waterborne, acrylated, aliphatic polyurethane dispersion with strong hydrophilic features. It is fast drying and it provides clear and crack-free films.

Daotan TW 6473 shows good wetting properties and it provides good shear stability and pigment compatibility. Once cured, Daotan TW 6473 gives good mechanical properties like abrasion resistance and scratch resistance and also good resistance to chemicals.

Main application of Daotan TW 6473 is coating of transparent plastics like PC, PMMA, ABS, etc. Adhesion on plastic substrates need to be tested in any case. Due to its strong hydrophilic features, Daotan TW 6473 is used preferably for anti-fogging-coatings.

Once dried, films or particles out of foams of Daotan TW 6473 will not be resoluble, due to its self-crosslinking properties. Therefore high air moisture should be maintained in parts of application equipment, where drying should not occur. Also during transport foam can be generated. This could lead to particles in the resin. Therefore we recommend filtration of Daotan TW 6473 over 5 µm before use.

STORAGE

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

It is important to protect Daotan TW 6473 from frost; at low temperatures it has therefore to be stored under frostproof conditions.

DISTINGUISHING FEATURES

Daotan TW 6473 shows higher light- and colourstability compared to Daotan VTW 6471.

REMARK:

Data contained in this publication are based on careful investigations (and are intended for information only). Due to scale up of this product there is not yet sufficient experience concerning serial production. We can therefore not exclude, that based on future knowledge product data and other indicated properties in upcoming Technical Data Sheets will be subject to change. We reserve the right to leave the product name unchanged, even if product data or other indicated properties will vary from the present product info. Regardless of the data contained in this publication any user is obliged to carry out tests under his own responsibility as to the suitability of the product for a particular use and to investigate the possible violation of industrial property rights of third parties. Information is therefore not binding and cannot be construed as guaranteeing specific properties of products. We apply our General Sales Conditions.