

PRELIMINARY PRODUCT INFORMATION

TYPE

Aqueous emulsion of an aliphatic urethane-acryl-hybrid, self-crosslinking, solvent and emulsifier free

FORM OF DELIVERY (f.o.d.)

36 % in water (36WA)

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

0.8 % N,N-dimethyl ethanolamine, as salt

TENTATIVE PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity (100 1/s; 23 °C)	[mPa.s]	15 - 250
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pH-Value DIN ISO 976

pH-value (10 %)		7,4 - 8,4
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Non-Volatile Matter DIN 55671

non-volatile matter (125 °C; 10 min; 0,7 g)	[%]	35 - 37
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Not continually determined:

Colour / Appearance VLN 250

colour		colourless to yellowish
appearance		opaque

Non-Volatile Matter DIN EN ISO 3251

non-volatile matter (1 h; 125 °C; 1 g)	[%]	35 - 37
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Density (Liquids) DIN EN ISO 2811-2

density approx. (20 °C)	[g/cm ³]	1,06
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Flash Point (Pensky-Martens) DIN EN ISO 2719

flash point	[°C]	> 100
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SPECIAL PROPERTIES AND USE

Daotan TW 7064 is a shear stable, solvent-free, self-crosslinking acrylated polyurethane dispersion providing quick drying and good wetting properties. Cured films are clear - transparent with good chemical- and abrasion resistance.

Daotan TW 7064 is providing excellent adhesion to plastics like e. g. ABS, PC, PP (fl.) and PVC. Accordingly Daotan TW 7064 is recommended for waterborne plastic primer. Furthermore Daotan TW 7064 is also suitable for waterborne Basecoats. These exhibit extraordinary bright metallic-effects.

STORAGE

At temperatures from 5 °C to 25 °C storage stability packed in original containers amounts to at least 450 days.

It is important to protect Daotan TW 7064 from frost; at low temperatures it has therefore to be stored under frostproof conditions.

Because of the amphiphilic character of Daotan TW 7064 the product tends to foam. Caused by the self-crosslinking moieties of the product, these foams can establish unreemulsifiable films, also in closed containers. It is strongly recommended to filter the product (5 µm filter) prior to use.

DISTINGUISHING FEATURES

Daotan TW 7064 and Daotan VTW 6462 / TW 6464 have an identical polymer structure. Due to a modified production process, Daotan TW 7064 is almost colorless and provides in comparison to Daotan VTW 6462 / TW 6464 SIGNIFICANTLY improved thermo-yellowing (up to 200 °C!). ALL other properties of Daotan TW 7064 and Daotan VTW 6462 / TW 6464 are IDENTICAL. According to our test results there are no differences in rheological behavior.

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.