

TYPE

Aqueous aliphatic polyurethane dispersion based on polycarbonate

Neutralization agent

approx. 1.1 % triethylamine, as salt

FORM OF DELIVERY (f.o.d.)

40 % in water / N-methylpyrrolidone (40WANMP)

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity (25 1/s; 23 °C)	[mPa.s]	500 - 1500
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Non-Volatile Matter DIN EN ISO 3251

non-volatile matter (1 h; 125 °C; 1 g)	[%]	38,5 - 41,5
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Not continually determined:

Colour / Appearance VLN 250

colour	whitish
appearance	cloudy

pH-Value DIN ISO 976

pH-value (10 %)	7 - 9
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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 VTW 1236 is a polyurethane dispersion which dries at room temperature without further coalescing agents or additives to clear, crack-free, water resistant and highly flexible films. The dispersion has a high shear stability and a good pigment compatibility. This allows Daotan VTW 1236 to be used to formulate highly flexible coating systems, especially for coating plastics.

Such systems exhibit very good adhesive properties e.g. to polycarbonate, ABS, polyamide, PUR-RIM, as well as pretreated PP/EPDM. The adhesion to each plastic substrate requires individual investigation. Special emphasis is given to its impact behaviour at low temperatures.

Daotan VTW 1236 has also been developed for water based printing inks. They are mainly used for the production of flexographic and special gravure inks because of the good adhesion to rigid and flexible PVC films. Due to these excellent adhesion properties Daotan VTW 1236 is particularly suitable for interlayer printing.

DILUTABILITY

Daotan VTW 1236 is unlimited dilutable with deionized water and ethanol, with isopropanol at least in a ratio of 1 : 2.

COMPATIBILITY

Daotan VTW 1236 is compatible with the pure acrylic dispersions Mowilith DM 772, DM 774, LDM 7760, DM 799 and DM 791 as well as with small proportions of water dilutable melamine resins, e. g. CYMEL 350 Resin and CYEMEL 385 Resin. Such additions improve scrub resistance.

Blending of Daotan VTW 1236 with acrylic dispersions or Viaktin VTE 6155w/50 WA is useful to improve flexibility, adhesion and abrasion resistance in comparison with films only based on acrylic dispersions.

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 VTW 1236 from frost; at low temperatures it has therefore to be stored under frostproof conditions.

