DAOTAN® TW 7063/36WA

Technical Datasheet

PRELIMINARY PRODUCT INFORMATION

TYPE

Aqueous emulsion of an aliphatic urethane-acryl-hybrid, 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
pH-Value DIN ISO 976		
pH-value (10 %)		7,4 - 8,4
Non-Volatile Matter DIN 55671		
non-volatile matter (125 °C; 10 min; 0,7 g)	[%]	35 - 37

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
Density (Liquids) DIN EN ISO 2811-2		
density approx. (20 °C)	[g/cm³]	1,05
Flash Point (Pensky-Martens) DIN EN ISO 2719		
flash point	[°C]	> 100

SPECIAL PROPERTIES AND USE

Daotan TW 7063 is a polyester-based, acrylic modified high molecular weight polyurethane dispersion. The resin provides shear stability and is free of solvents and emulsifiers. Dried at ambient temperature Daotan TW 7063 yields clear and crack-free films without any previous additions of solvents or paint additives.

Paints based on Daotan TW 7063 provide quick curing. Cured films are characterized by good abrasion resistance and good resistance to household cleaners. Typical applications for Daotan TW 7063 are w/b Primers and Basecoats for various plastic substrates such as ABS, PA, PVC. Adhesion to the specific types of plastic used has to be carefully checked in advance.

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 7063 from frost; at low temperatures it has therefore to be stored under frostproof condition.

Due to the quick physical drying of Daotan TW 7063 it is strongly recommended to filter the product (5 µm filter) prior to use.

DISTINGUISHING FEATURES

Daotan TW 7063 and Daotan VTW 6463 have an IDENTICAL polymer structure. Due to a modified production process, Daotan TW 7063 is almost colorless and provides in comparison to Daotan VTW 6463 SIGNIFICANTLY improved thermo-yellowing (up to 200 °C!). ALL other properties of Daotan TW 7063 and Daotan VTW 6463 are IDENTICAL. According to our test results there are also no differences in rheological behaviour.

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.