

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 [mPa.s] 10 - 250
(100 1/s; 23 °C)

pH-Value DIN ISO 976
pH-value 7,5 - 8,8
(10 %)

Non-Volatile Matter DIN 55671
non-volatile matter [%] 35 - 37
(125 °C; 10 min)

Not continually determined:

Colour / Appearance VLN 250
colour whitish
appearance opaque

Non-Volatile Matter DIN EN ISO 3251
non-volatile matter [%] 35 - 37
(1 h; 125 °C; 1 g)

Density (Liquids) DIN EN ISO 2811-2
density [g/cm³] 1,05
approx. (20 °C)

Flash Point (CCCFP) ASTM D 6450
flash point [°C] > 95

SPECIAL PROPERTIES AND USE

Daotan TW 7066 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 7066 yields clear and crack-free films without any previous addition of solvents or paint additives.

In conjunction with thickeners (especially layered silicates) Daotan TW 7066 is providing a unique viscosity behavior, i.e. already small additions of thickener cause a significant pseudo-plasticity. Accordingly Daotan TW 7066 is a perfect fit for high quality, waterborne metallic Basecoat formulations for automotive OEM and vehicle refinish applications. These Basecoats are characterized by outstanding appearance, excellent mechanical properties and wet adhesion as well as very good outdoor durability.

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 7066 from frost; at low temperatures it has therefore to be stored under frostproof conditions.

Due to the quick physical drying of Daotan TW 7066 it is strongly recommended to filter the product (5 µm filter) prior to use.

DISTINGUISHING FEATURES

Daotan TW 7066 and Daotan TW 6466 have an IDENTICAL polymer structure. Due to a modified production process, Daotan TW 7066 is almost colorless and provides in comparison to Daotan TW 6466 SIGNIFICANTLY improved thermo-yellowing (up to 200 °C!). ALL other properties of Daotan TW 7066 and Daotan TW 6466 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.