

TYPE

Silicone-modified oil free polyester

FORM OF DELIVERY (f.o.d.)

65 % in methoxypropyl acetate (65MPAC)
(containing also 3 % n-butanol)

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219
dynamic viscosity [mPa.s] 7500 - 9000
(25 1/s; 23 °C)

Iodine Colour Number DIN 6162
iodine colour number <= 5

Acid Value DIN EN ISO 2114
acid value [mg KOH/g] 4 - 10
(non volatile matter)

Non-Volatile Matter DIN EN ISO 3251
non-volatile matter [%] 62 - 66
*
(1 h; 125 °C; 1 g; propylene glycol methylether acetate)

Not continually determined:

Density (Liquids) DIN EN ISO 2811-2
density [g/cm³] 1,12
approx.
(20 °C)

Flash Point DIN EN ISO 1523
flash point [°C] 38
approx.

SPECIAL PROPERTIES AND USE

Vialkyd VTS 1202 is a silicone polyester with rapid curing and non-yellowing properties designed for coil coating enamels. Enamels made with Vialkyd VTS 1202 have excellent mechanical properties such as hardness, impact resistance and adhesion even to difficult substrates. Its silicone content has given excellent results after more than 5 years Florida exposure, with high non chalking resistance and gloss retention.

A ratio by weight of 90 parts Vialkyd VTS 1202 and 10 parts Maprenal MF 900 (on solids) to 98 : 2 is recommended for cross linking to achieve optimum coil coating properties.

Vialkyd VTS 1202 can also be crosslinked with polyisocyanates to formulate high quality two-pack coating systems.

Vialkyd VTS 1202 can be formulated together with all commercially available pigments, whereas only pigments with sufficient outdoor durability should be selected. The pigment binder ratio for white systems should be at the level of 1 : 1.

The use of 0,25 % Maprenal MF 800 on total resin solids greatly improves flow.

The curing schedule at 240 °C to 300 °C is 90 to 30 seconds. Coatings based on Vialkyd VTS 1202 can also be cured at lower temperatures (e. g. 180 °C for 15 minutes).

DILUTABILITY

Vialkyd VTS 1202 can be freely diluted with glycol ether acetates, esters and ketones with only limited dilutability with aromatic hydrocarbons and no dilutability with aliphatic hydrocarbons.

COMPATIBILITY

Vialkyd VTS 1202 is compatible with most oilfree polyesters such as Vialkyd AN 950, with hexamethoxymethylmelamine resins such as Maprenal MF 900 or with benzoguanamine resins such as Maprenal MF 988.

Vialkyd VTS 1202 is even compatible with the Maprenal grades MF 915 and MF 590 as well as with Beckopox EP 301. A limited compatibility exists with the Maprenal grades MF 800 and MF 650.

STORAGE

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

DISTINGUISHING FEATURES

Compared with conventional polyester resins coatings based on Vialkyd VTS 1202 show improved exterior durability and gloss retention.

* Note:

The non-volatile matter content of a product is not an absolute quantity but depends upon the temperature and period of heating used for the test. Consequently, when using this method, only relative and not true values for non-volatile matter content are obtained owing to solvent retention, thermal decomposition and evaporation of low molecular mass constituents. The method is therefore primarily intended for testing different batches of the same type of product. DIN EN ISO 3251 (9/95, page 2).