

TYPE

Thixotropic, air-drying, long-oil alkyd resin

Soya oil type

FORM OF DELIVERY (f.o.d.)

49 % in Shellsol D60 (49SD60)

RESIN COMPOSITION

(approx.)

60 % oil

PRODUCT DATA

Determined per batch:

Dynamic Viscosity (High - Shear) ASTM D 4287
dynamic viscosity [mPa.s] 160 - 320
(10000 1/s; 23 °C)

Iodine Colour Number DIN 6162
iodine colour number <= 8

Acid Value DIN EN ISO 2114
acid value [mg KOH/g] <= 15
(non volatile matter)

Non-Volatile Matter DIN 55671
non-volatile matter [%] 48 - 50
(120 °C; 5 min)

Not continually determined:

Non-Volatile Matter DIN EN ISO 3251
non-volatile matter [%] 48 - 50
(1 h; 125 °C; 1 g)

Density (Liquids) DIN EN ISO 2811-2
density [g/cm³] 0,91
approx.
(20 °C)

Flash Point DIN EN ISO 1523
flash point [°C] 62
approx.

SPECIAL PROPERTIES AND USE

Vialkyd AS 6140sca/49SD60, directly after production, is supplied as a liquid pumpable urethane thixotropic alkyd, which can be used as sole binder or in combination with other alkyds for decorative paints and wood stains. After a while without stirring some thixotropy occurs which affects or inhibits pumpability (see Storage).

Concerning gloss retention and weather resistance Vialkyd AS 6140sca/49SD60 shows better properties than polyamide thixotropic alkyds. The thixotropy of urethane thixotropic alkyds can be easier destroyed by stirring than that of polyamide thixotropic resins. Thixotropy can be activated and adjusted by adding a polar solvent, for example propylene glycol. In order to avoid cloudiness we recommend not to add more than four percent propylene glycol (calculated on resin solids). The activated and adjusted thixotropy will stay largely constant after ripening for one week longest.

Recommended driers are cobalt (0.05 % metal, calculated on resin solids), zircon (0.15 % metal, calculated on resin solids), and calcium (0.1 % metal, calculated on resin solids). To avoid skinning we recommend the addition of about 1.5 % Additol XL 297 (calculated on resin solids).

STORAGE

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 730 days.

After production Vialkyd AS 6140sca/49SD60 is fluent and pumpable. After storing for about six weeks, especially at elevated temperature, some thixotropy may occur without prior activation by polar solvents. We recommend therefore storage in a tank with stirrer.

DISTINGUISHING FEATURES

Urethane thixotropic alkyds are signed with the combination "sca", polyamide thixotropic alkyds have the suffix "tix" in their name. Vialkyd AS 6140sca/49SD60 shows a longer lasting pumpability compared to Vialkyd VAS 6105sca/50SD60.

