

TYPE

Fatty acid modified, non-drying phthalic resin

FORM OF DELIVERY (f.o.d.)

70 % in solvent naphtha 150/180 (70SNA)
(containing also 4 % xylene)

SPECIAL PROPERTIES AND USE

Grinding resin for pigment pastes. Excellent compatibility characteristics with alkyd stoving paints, thermosetting acrylic paints, NC-lacquers, acid curing enamels, alkyd- or acrylic-isocyanate enamels.

RESIN COMPOSITION

(approx.)

43 % saturated fatty acids (as triglycerides)
33 % phthalic anhydride

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity [mPa.s] 230 - 390
53 % solvent naphtha 150/180
(100 1/s; 23 °C)

Iodine Colour Number DIN 6162

iodine colour number <= 5

Acid Value DIN EN ISO 2114

acid value [mg KOH/g] < 10
(non volatile matter)

Non-Volatile Matter DIN 55671

non-volatile matter [%] 68 - 72
(120 °C; 5 min)

Not continually determined:

Non-Volatile Matter DIN EN ISO 3251

non-volatile matter [%] 68 - 72
(1 h; 125 °C; 1 g)

Hydroxyl Value DIN 53240

hydroxyl value [mg KOH/g] 130
approx.
(solid matter content)

Density (Liquids) DIN EN ISO 2811-2

density [g/cm³] 1,04
approx.
(20 °C)

Flash Point DIN EN ISO 1523

flash point [°C] 45
approx.

DILUTABILITY

| | | | |
|------------------------------|---|------------------------|---|
| special white spirit 100/140 | ○ | methyl isobutyl ketone | ● |
| white spirit | ○ | butyl acetate | ● |
| turpentine oil | ○ | methoxypropyl acetate | ● |
| xylene | ● | methoxypropanol | ● |
| solvent naphtha 180/210 | ● | ethanol | ● |
| acetone | ● | butanol | ● |

● = unlimited dilutability
○ = substantial dilutability

⊙ = limited dilutability
○ = very limited or no dilutability

COMPATIBILITY

| | | | | | |
|--|----|----|----|----|----|
| % Vialkyd VAC 4309 | 90 | 75 | 50 | 25 | 10 |
| % other binder | 10 | 25 | 50 | 75 | 90 |
| Vialkyd AF 724, AS 673m | ○ | ○ | ○ | ○ | ○ |
| Alkyd resins | | | | | |
| Vialkyd AL 504, AC 451n | ● | ● | ● | ● | ● |
| Vialkyd AR 340, AR 427, AC 274 | ● | ● | ● | ● | ● |
| Acrylic resins | | | | | |
| Viacryl SC 420 | ● | ○ | ○ | ○ | ○ |
| Amino resins | | | | | |
| Viamin HF 164, HF 244 | ● | ● | ● | ● | ● |
| Viamin HP 364 | ● | ● | ● | ● | ● |
| Maprenal MF 650 | ● | ● | ● | ● | ● |
| Other binder | | | | | |
| Desmodur L, Desmodur N | ● | ● | ● | ● | ● |
| Maleic resins, e.g. Alresat KM 201 | ● | ● | ● | ● | ● |
| nitrocellulose, e.g. 27 E, 9 E | ● | ● | ● | ● | ● |
| celluloseacetobutyrate, e.g. CAB-551-0.2 | ● | ● | ● | ● | ● |
| Beckopox EP 304, EP 307 | ○ | ○ | ○ | ○ | ○ |
| Duroxyn EF 900, EF 935 | ○ | ○ | ○ | ○ | ○ |

● = definite compatibility ○ = very limited or no compatibility

SUGGESTED USES

Vialkyd VAC 4309 has been designed as grinding resin for the formulation of pigment pastes.

The pastes can be reduced with the respective resins and give paints keeping their basic paint properties. Vialkyd VAC 4309 has a balanced functionality and is fully integrated into the cured film. Therefore, it must be fully considered as resin component for reaction with amine resins, polyisocyanates, nitrocellulose systems and acid curing systems.

Vialkyd VAC 4309 shows yellowing resistance up to 30 min / 180 °C and acts up favourably to top quality alkyd resins. Solvent resistance is not adversely affected.

Owing to the excellent performance of Vialkyd VAC 4309 in a variety of paint formulations and due to the fact that Vialkyd VAC 4309 does not subdue the characteristics of the main binder, paint preparation can be substantially rationalized with this new grinding medium.

PROCESSING

The low viscosity of Vialkyd VAC 4309/70SNA allows processing on any modern milling facilities. The pigment pastes have good storage stability for long periods.

STORAGE

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

DISTINGUISHING FEATURES

Vialkyd VAC 4309/70SNA is similar in the application with Vialkyd AC 290/70MPAC. Stoving Paints with stoving conditions under 30 min / 130 °C indicate slightly higher hardness with Vialkyd VAC 4309/70SNA.

Producer:

Desmodur L, Desmodur N (Covestro)
CAB-551-0.2 (Eastman)