

TYPE

Air-drying styrene modified oil

Linseed oil typ

FORM OF DELIVERY (f.o.d.)

60 % in white spirit (60WS)

SPECIAL PROPERTIES AND USE

Easy to use, excellent weather resistance, good water and corrosion resistance, high gloss.

Sole binder for aluminium paints with brilliant effect and good gloss retention. Used for zinc dust paints, mica iron paints, and anticorrosive paints.

RESIN COMPOSITION

(approx.)

60 % oil
40 % styrene

PRODUCT DATA

Determined per batch:

Dynamic Viscosity DIN EN ISO 3219

dynamic viscosity [mPa.s] 160 - 300
(100 1/s; 23 °C)

Iodine Colour Number DIN 6162

iodine colour number <= 10
50 % white spirit
possibility of slight opalescence

Acid Value DIN EN ISO 2114

acid value [mg KOH/g] < 6
(non volatile matter)

Non-Volatile Matter DIN 55671

non-volatile matter [%] 58 - 62
(120 °C; 5 min)

Not continually determined:

Non-Volatile Matter DIN EN ISO 3251

non-volatile matter [%] 58 - 62
(1 h; 125 °C; 1 g)

Density (Liquids) DIN EN ISO 2811-2

density [g/cm³] 0,90
approx.
(20 °C)

Flash Point DIN EN ISO 1523

flash point [°C] 25
approx.

DILUTABILITY

special white spirit 100/140	●	methyl isobutyl ketone	●
white spirit	●	butyl acetate	●
turpentine oil	●	methoxypropyl acetate	●
xylene	●	methoxypropanol	●
Shellsol AB	●	ethanol	○
acetone	●	butanol	○

● = unlimited dilutability
● = substantial dilutability

⊙ = limited dilutability
○ = very limited or no dilutability

COMPATIBILITY

% Vialkyd AV 608	90	75	50	25	10
% other binder	10	25	50	75	90

Drying oils (cold mixture)

paint linseed oil	●	●	●	●	●
linseed oil stand oil 4 Pa.s	○	○	○	○	○

Alkyd resins

Vialkyd AM 342, AM 404	○	○	○	○	○
Vialkyd AF 474	○	○	○	○	○
Vialkyd AF 724, AS 673m, AS 602	○	○	○	○	○
Vialkyd AV 352 m, AY 402, AY 412	○	○	○	○	○
Vialkyd AV 462, AV 384	○	○	○	●	●
Vialkyd AY 472	●	●	●	●	●

Rosin based resins

Alresat KM 224h	●	●	●	●	●
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Other binders

Alpex CK 450	○	○	○	○	●
nitrocellulose 24 E	○	○	○	○	○

● = definite compatibility

○ = very limited or no compatibility

SUGGESTED USES

Vialkyd AV 608 is a styrene-modified oil which is characterized by high resistance to water and corrosion. In aluminium-pigmented paints it yields a brilliant effect, good gloss retention and excellent weather resistance.

It is used as sole binder for high-build, readily brushable, air-drying aluminium, zinc dust and mica iron paints, zinc chromate primers, and lead and chromate-free ground coats. On account of its high degree of water resistance it is used for paint coating of steel structures such as oil and gas tanks, hall and bridge constructions, etc.

Vialkyd AV 608/60WS may show some cloudiness, which, however, does not influence the technical properties of the paint.

PROCESSING

Vialkyd AV 608 can be processed by conventional methods with all pigments and fillers in current use. With red lead paints, storage stability has to be tested in advance, as there is the risk of viscosity pickup. For aluminium paints, only leafing aluminium pastes may be used; storage of ready-made aluminium pastes hardly ever results in discolouration of the aluminium component.

In aluminium paints, addition of 0.05 % Co (ratio of metal to solid resin) is recommended as drier, in anticorrosive paints addition of 0.05 % CO, 0.5 % Pb and 0.2 % Ca (ratio of metals to solid resin); lead-free driers (e. g. with Co, Zr, Ca) can also be formulated.

In order to avoid skinning in storage containers, an antiskinning agent is indispensable; addition of 1 - 1.5 % Additol XL 297 (referred to the amount of solid resin) is therefore recommended.

STORAGE

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

DISTINGUISHING FEATURES

As a styrene-modified oil, Vialkyd AV 608 has a restricted degree of compatibility with other binders on account of its high molecular weight. It is therefore absolutely necessary to test its compatibility with prospective partner resins. Hardness of the paint film and drying velocity can be increased by addition of hard resins.

In aluminium-pigmented paints, additions of hydrocarbon resins will speed up drying but reduce the brilliant aluminium effect in most cases.