

VINALKYD 450 P



Unsaturated polyester resin

- Description:** It is an orthophthalic, high reactivity unsaturated polyester resin.
- Use:** It is used for the production of articles from fibreglass, which are used in the boat building, in the house, the construction and the industry. The hardening is carried by addition of 1% Co-1% and 4% MEKP-50 (Butanox M-50). The reinforcing can be achieved with the use of glass-mat up to 60 %, in several layers.
- It may applied after the gel coats;
 - It may be pigmented with organic and inorganic pigments;
 - It may be filled up to 60% with talc, silica flours and marble powder (the fillers should be dry) for preparation of articles from polymer marble in a thin layer;
 - After the final layer a topcoat may be applied.
- Classification:** Meets the requirements of the EU legislation.

CHARACTERISTICS

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Appearance: (visually)	Transparent syrup-like liquid
Colour Gardner: (BNS ISO 4630)	max 2
Viscosity Brookfield at 23°C: (ISO 2555)	950-1250 mPa.s
Acid number: (BNS EN ISO 3682)	max 27 mgKOH/g
Non-volatile content, 125°C/1h: (BNS EN ISO 3251)	66±1 %

Gelling time at 20°C: 8-16 min
(4% MEKP-50 + 1% Co-1%)

OTHER INFORMATION

Conditional viscosity, Ø 4 mm/20°C: 220-260 s
(Test method №8)

Density at 20°C: 1,13 g/cm³
(BNS ISO 2811-1)

Flash point, covered pot: 34°C
(BNS ISO 2719)

Modifications: A (accelerated)

Physical-mechanical properties

Hardening condition: 24h at room temperature
Post-curing: 16 h at 40°C

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VALUE

Flexural strength: min.128 MPa
(BNS EN ISO 178)

HDT: min.78°C
(BNS EN ISO 75-1,2)

Hardness at 25°C (Barcol): min. 45
(ASTM D 2583)

Solubility: It dissolves in styrene and acetone.

Application: Unsaturated polyester resin Vinalkyd 450 P is curing with following hardening system :
Add 10 g Co-1% to 1000 g resin. The mixture should be well homogenized and then add 40 g MEKP-50, stir again and use it for preparation of the articles. The viability of the mixture is from 8 to 16 minutes and depends on the temperature of the resin, as the process of gelling accelerates additionally at temperature higher than 20°C, and the lower temperature slows down the time of gelling.

Package: In metal conic cans; metal barrels, plastic containers; cisterns from stainless steel.

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Storage:

The packed unsaturated polyester resin is stored in closed, dry and fire prevented storage areas, protected from direct sunlight at temperature up to 25°C.

Storage shelf life- 6 months from the production date.

Hygiene, safety work and ecology:

Refer to the Safety Data Sheet for further information on the safe storage, use and handling of Vinalkyd 450 P. The Material Safety Data Sheet (MSDS) should always be read and understood thoroughly before handling the product, and adequate safety procedures should be followed.

Attention! Don't allow direct contact of organic peroxides with accelerators when using, transporting and storing.

The present technical description has the purpose to inform the clients on the quality of our product. The data herein is based on our present best knowledge. We invite our clients before work to check the quality of the product or its adaptation to the base and to make an experimental application. Our clients must be sure, that the present technical description hasn't been changed or replaced by a newer edition.

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