

## VINALKYD 901 PE-A



### Orthophthalic unsaturated polyester resin

- Description:** It is orthophthalic, medium reactive, pre-accelerated unsaturated polyester resin.
- Use:** Used for production of articles from glass fibre for general purpose end for polymermarble. To harden add 2 % MEKP (Butanox M-50).
- It can be applied after gel coats;
  - Suitable for casting;
  - 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;
  - Very good mechanical properties
- Classification:** In compliance with requirements of EU legislation.

## CHARACTERISTICS

INDEXES	NORM
<b>Appearance:</b> (visually)	Pink-colored syrup-like liquid
<b>Viscosity after Brookfield 25°C:</b> (sp.3/20 rpm) (ISO 2555)	700 - 900 mPa.s
<b>Non-volatile content</b> (BNS EN ISO 3251)	70±2 %
<b>Acid number:</b> (BNS EN ISO 3682)	max 32 mgKOH/g

**Reactivity at 35 °C**

(after adding of 2 % Butanox M-50)

- |                                                     |                         |
|-----------------------------------------------------|-------------------------|
| – <b>gelling time</b>                               | 7 min 30 s – 9 min 30 s |
| – <b>hardening time</b><br>(from gel time to T max) | 4 min 30 s – 5 min 30 s |
| – <b>time to reach peak</b>                         | 12-15 min               |
| – <b>temperature maximum</b>                        | 170-190 °C              |

(Test Method)

**Thermostability at 120°C**

(Test Method)

min 1,5 h

**OTHER DETAILS****Density at 20°C:**

(BNS ISO 2811-1)

1,1 g/cm<sup>3</sup>**Flash point, covered pot:**

(BNS EN 2719)

32°C

**PHISICAL –MECHANICAL INDEXES****Hardening system: 2% MEKP -50****Hardening conditions:**

24 h at room temperatures

Post-curing 16h at 40 °C

**INDEX****VALUE****Tensile strength :**

(BNS EN ISO 527-1,2)

min. 60 MPa

**Flexural strength :**

(BNS EN ISO 178)

min. 120 MPa

**Elongation at break :**

(BNS EN ISO 527-1.2)

min. 2,2 %

**Flexural modul:**

(BNS EN ISO 178)

min. 3200 MPa

**Hardness at 25 °C (Barcol)**

(ASTM D 2583)

min. 50

<b>Heat deflection temperature:</b> (BNS EN ISO 75-1,2)	min. 60°C
<b>Water absorption (24 hours)</b> (ISO 62)	max. 0.2%
<b>Solubility:</b>	Dissolves in styrene, n-butyl acetate and acetone.
<b>Application:</b>	Unsaturated polyester resin Vinalkyd 901 PE-A hardens with the following hardening system: Add to 1000 g of resin 20 g Hardener MEKP-50 (Butanox M-50) homogenized well and then use for preparation of the articles. Mixture viability is from 7 min 30 s to 9 min 30 s and depends on the temperature of the resin, as the process of jelling is accelerated additionally at temperature higher than 35° C, but lower temperature will delay the gelling time.
<b>Packaging:</b>	In metal conic cans of 22 L; metal barrels; cisterns from stainless steel
<b>Storage:</b>	Store packaging of unsaturated polyester resin in sheltered, dry and fireproof storage areas, without access of direct sunlight at temperature up to 25°C. Prolonged storage or storage outside of recommended conditions can influence liquid resin properties like viscosity and gel time. Prolonged storage can reduce the effect of the accelerator. An addition of 0.5-1.0% Co-1% may be necessary to restore the original potlife. Shelf life - 3 months from date of production. <b>Attention!</b> Don't allow direct contact of organic peroxides with accelerators when using, transporting and storing.
<b>Hygiene, safety work and ecology:</b>	Refer to the Material Safety Data Sheet for further information on the safe storage, use and handling of Vinalkyd 901 PE-A. The Material Safety Data Sheet (MSDS) should always be read and understood thoroughly before handling the product, and adequate safety procedures should be followed

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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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