

VINALKYD 25 PE



Unsaturated polyester resin

- Description:** It is an isophthalic, medium reactivity, non-accelerated, non-thixotroped unsaturated polyester resin.
- Use:** It is used for the production of polyester isophthalic gelcoat, which serves for making of the face layer of the articles from glass-fibre. The hardening is carried by addition of accelerator Co-1% and hardener MEKP-50 (Butanox M-50) .
- It can be thixotroped;
 - It can be pigmented with organic and inorganic pigment pastes;
 - Can be on it apply unsaturated polyester resins reinforced with glass.
- Classification:** Vinalkyd 25 PE correspond to type 1140 to DIN 16 946/2 and is classified in group 2 according to DIN 18 820/1
In compliance with the requirements of EU legislation.

CHARACTERISTICS

| INDEXES | NORM |
|--|-------------------------------|
| Appearance: (visually) | Transparent syrup-like liquid |
| Gardner colour: (BNS ISO 4630) | max 2,5 |
| Non-volatile content, 1h/125°C: (BNS EN ISO 3251) | 65 ± 1 % |
| Viscosity Brookfield at 23°C: (ISO 2555) | 600-900 mPa.s |
| Acid number: (BNS EN ISO 3682) | max 30 mgKOH/g |
| Gel time at 25°C: (1% Co-1% and 1,5% Butanox M-50) | 6-12 min |

ADDITIONAL INFORMATION

| | |
|---|------------------------|
| Conditional viscosity, Ø 4 mm/20°C: (Test method № 8) | 150 – 200 s |
| Density at 20°C: (BNS ISO 2811-1) | 1,14 g/cm ³ |
| Flash point, closed cup: (BNS ISO 2719) | 33°C |
| Modifications: | A (accelerated) |

PHYSICAL-MECHANICAL PROPERTIES

Hardening conditions:

24 h at room temperatures
Post-curing -16 h at 40 °C

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VALUE

Tensile strength:
(BNS EN ISO 527-1,2)

min 77 MPa

Flexural strength:
(BNS EN ISO 178)

min 130 MPa

HDT:
(BNS EN ISO 75-1,2)

min 90°C

Solubility: Dissolves in styrene and acetone

Application:

The unsaturated polyester resin Vinalkyd 25 PE is hardened with the following hardening system:

Add 10 g Co-1% to 1000 g resin, homogenize the mixture well and then add 15 g hardener Butanox M-50, stir again and use it for preparation of the articles. The viability of the mixture is from 6 to 12 minutes and depends on the temperature of the resin, as the process of gelling accelerates additionally at temperature higher than 25°C, and the lower temperature slows down the gelling time.

Package:

In metal conic cans from 22 l; metal barrels; cisterns from stainless steel.

Storage:

Store the packed unsaturated polyester resin in sheltered, dry and fireproof warehouses, protected from direct sunlight, at temperature up to 25°C.
Storage shelf life – 6 months from the production date.

Attention! Do not allow direct contact of organic peroxides with accelerators when using, transporting and storing.

**Hygiene, safety work
and ecology:**

Refer to the Material Safety Data Sheet for further information on the safe storage, use and handling of Vinalkyd 25 PE. The Material Safety Data Sheet (MSDS) should always be read and understood thoroughly before handling the product, and adequate safety procedures should be followed.

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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