

Vinalkyd 550 PE-TA-LE-B



Orthophthalic Unsaturated Polyester Resin

Description: Thixotroped previously accelerated, orthophthalic, medium reactivity unsaturated polyester resin. Contains special additive for decreasing of styrene emissions in a work environment. Provides cured laminate a tack-free surface. The resin contains a peroxide indication system, which effects a color change from bluish to pale green after addition of catalyst.

Use: Applied for production of fibreglass articles used for boat construction, car body parts, cabins, different moulded parts for building and industry purposes. The hardening is carried by addition of 1,5% MEKP-50 (Butanox M-50). Reinforcement is made by glass-fibre addition up to 60 % in several layers.

- It can be applied after gel coats;
- It may be pigmented with organic and inorganic pigments;
- Very good wetting properties of glass-fibre;
- It does not flow down, when applied on vertical surface;
- Gives tack-free surface of articles
- On the last coat can be applied topcoat.

Classification: Meets the requirements of EU legislation .

Characteristics

Properties	NORM
Appearance: (visually)	Bluish-coloured tixotropic liquid
Non-volatile content, 125°C/1h: (BNS EN ISO 3251)	57 ± 1 %
Gel time 20°C: (ISO 2535)	30-40 min
Viscosity Brookfield at 23°C (sp.2/12rpm): (ISO 2555)	1100-1300 mPa.s

Tixotropic index (sp.3, 5/50rpm): min 2,4
(ASTM D 2196-05 (B))

Other data

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

Acid number: max 26 mgKOH/g
(BNS EN ISO 3682)

Flash point: 34°C
(BNS ISO 2719)

Physical-mechanical properties

Hardening system: 1.5% 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)	69 MPa
Flexural strength: (BNS EN ISO 178)	117 MPa
Barcol Hardness : (EN 59)	45-49
HDT (BNS EN ISO 75-1,2)	min.63°C

Application:

Unsaturated polyester resin Vinalkyd 550 PE-TA-LE-B is curing with following hardening system

Add to 1000 g resin 15 g MEKP (Butanox M-50). The mixture must be well homogenized and then used for preparation of the details. The viability of the mixture is from 30 to 40 minutes and depends on the temperature of the resin, as the process of gelling accelerates additionally at temperature higher than 20°C, however low temperature decelerates the time of gelling.

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.

- Packaging:** In metal conic boxes; metal barrels and cisterns from stainless steel
- 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 - 4 months from the production date
- Hygiene, safety work and ecology:** Refer to the Material Safety Data Sheet for further information on the safe storage, use and handling of Vinalkyd 550 PE-TA-LE-B. 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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