Technical data sheet
April 2014
Cancels and replaces all previous editions

Vinalkyd 550 PE-TALE-LV



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 tackfree surface. The resin contains a peroxide indication system, which effects a colour change from bluish to pale green after addition of catalyst.

Use:

Applied for production of fibreglass articles used for boat construction, household, building and industry purposes. The hardening is carried by addition of 2% 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

INDEX NORM

Appearance: Bluish-colored tixotropic liquid

(visually)

Non-volatile content, 125°C/1h: $58 \pm 2 \%$

(BNS EN ISO 3251)

Reactivity at 20°C:

 -gel time
 11-21 min

 -20°C- to Tmax
 29-39 min

 -exothermic peak
 160-180°C

(Test Method)

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800-1000 mPa.s Viscosity at Brookfield 23°C (sp.2/12rpm):

(ISO 2555)

Tixotropic index (sp.3, 5/50rpm): min 2,4

(ASTM D 2196-05 (B))

Other data

Density at 20°C: $1,1 \text{ g/cm}^3$

(BNS EN ISO 2811-1)

Acid number: max 26 mgKOH/g

(BNS EN ISO 3682)

34°C Flash point:

(BNS ISO 2719)

Modifications: B (blue colored (peroxide indicator))

FC (fast curing)

Physical-mechanical properties

Hardening system: +2% MEKP

Hardening condition: 24h at room temperatre

Post -curing 16h at 40°C

Index: Value

Tensile strength:

min 65 MPa (BNS EN ISO 527-1,2)

min 115 MPa Flexural strength:

(BNS EN ISO 178)

Hardness at 25 °C: min 40

(ASTM D 2583)

min 63 °C HDT:

(BNS EN ISO 75-1,2)

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Application: Unsaturated polyester resin Vinalkyd 550 PE-TALE-LV is curing with

following hardening system

Add to 1000 g resin 20 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 11 to 21 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.

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.

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 pot life.

Storage shelf life - 3 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 550 PE-TALE-LV. 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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