Technical Data Sheet
JANUARY 2016
Cancels and replaces all previous edition

## VINALKYD 620 PE-A



# **Orthophthalic Unsaturated Polyester Resin**

**Description:** It is an orthophthalic, medium reactive, with low viscosity, preliminary accelerated

unsaturated polyester resin

Use: Applied for production of sanitary articles and baths from reinforcing media in

combination with glass fibres or roving, suitable for acrylic sheet application. The hardening is carried by addition of 2 % MEKP-50 (Butanox M-50).

**Properties:** • Has good PMMA adhesion (acrylic base)

• Can be pigmented with inorganic pigments and tixothroped

• Can be filled up to 60% with fillers – type carbonates

• Very good fibreglass wetting properties

• Applied by spray gun

• Ready mixture no flow down, when applied on vertical surface

**Classification:** Meets the requirement of the EU legislation.

#### **Characteristics**

Properties NORM

Appearance: Pink colored liquid

(visually)

Viscosity at Brookfield 25°C(sp.2/50rpm): 180-320 mPa.s

(ISO 2555)

Acid number: max 30 mgKOH/g

(BNS EN ISO 3682)

Non-volatile content 125°C/1h:  $60 \pm 1.5 \%$ 

(BNS EN ISO 3251)

**Reactivity at 25°C:** (+ 2 % MEKP-50)

- **gel time** 4 – 7 min - **hardening time** 7 – 10 min

temperature maximym 160- 185°C

(Test method)

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#### Other details

**Density at 20°C:** 1,1 g/cm<sup>3</sup>

(BNS ISO 2811-1)

Flash point: 32°C

(BNS ISO 2719)

### PHYSICAL-MECHANICAL PROPERTIES

Hardening system: 2 % MEKP

Water absorption (24 hours):

(ISO 62)

Hardening condition: 24h at room temperatre

Post -curing 16 h at 40°C

Index Value min. 70 MPa **Tensile strength:** (BNS EN ISO 527-1,2) min. 120 MPa Flexural strength: (BNS EN ISO 178) Flexural moduls: min. 3400 MPa (BNS EN ISO 178) **Elongation at break:** min. 3,0 % (BNS EN ISO 527-1,2) min. 79°C HDT: (BNS EN ISO 75-1,2) Hardness at 25°C (Barcol): min.40 (ASTM D 2583)

**Solubility:** It is dissolves in styrene, n-butyl acetate and acetone

**Application:** Unsaturated polyester resin Vinalkyd 620 PE-A is curing with following hardening

system.

Add to 1000g resin 20 g MEKP-50 (Butanox M-50). The mixture must be well homogenized and then used for preparation of the details. The viability of the mixture is from 4 to 7 minutes and depends on the temperature of the resin, as the process of gelling accelerates additionally at temperature higher than 25°C, however low

max 0,2%

temperature decelerates the time of gelling.

Recommended post-curing of resin: 2h at 35-40 °C

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Page 3 of 3

Packaging: In metal conic boxes 22 L; metal barrels; plastic containers; 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-** 3 months from the production date.

Prolonged storage or storage outside of recommended conditions can influense on liquid resin properties like viscosity and gel time. An addition of 0.5-1.0% Co-1% may

be necessary to restore the original potlife.

Hygiene, safety work and ecology:

Refer to the Material Safety Data Sheet for further information on the safe storage, use and handling of Vinalkyd 620 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.

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.