TECHNICAL DESCRIPTION
282 / June 2011

Vinalkyd 550 PE – R/61

It is orthophthalic, high reactive, non-accelerated, non-tixotropic unsaturated polyester resin design for general purpose glass reinforced application(GRP)

Use:

The resin has good mechanical strength properties and suitable for boat construction, car body parts , cabins, constructions and industry purposes. The hardening is carried by addition of Accelerator Co-2% and Hardener 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;
- Very good wetting properties of fibre glass
- Good mechanical properties
- On the last coating might be applied top coat

Classification: Meets the requirements of EU legislation.

CHARACTERISTICS

INDEXES	NORM
Appearance: (visually)	Transparent syrup-like liquid
Gardner color (BNS ISO 4530)	max.2
Viscosity at Brookfield at 23°C: (ISO 2555)	550-850 mPa.s
Acid number: (BNS EN ISO 3682)	max 30 mgKOH/g
Non-volatile content: (BNS EN ISO 3251)	65+1%
Reactivity at 82°C:	
- gel time from 65 to 88°C	4-9 min
- hardening time	5-10 min
- Exothermic peak	min 160°C
(BNS EN ISO 584)	

ADDITIONAL INFORMATION

Reactivity at 25°C:	
- gelling time	7 - 12 min
- hardening time/from gel time to Tmax/ -	5 - 10 min
temperature maximum	min. 160°C
(Test Method)	
Density at 20°C:	1,13 g/cm^3
(BNS ISO 2811-1)	
Flash point, covered pot:	33°C
(BNS EN ISO 1523)	

Physical-mechanical properties

Hardening system: 1%Co-2% +2% MEKP
Hardening condition: 24h at room temperatre
Post -curing 16h at 40°C

Index

	Value
Tensile strength (BNS EN ISO 527-1,2)	min.70 MPa
Flexural strength (BNS EN ISO 178)	min.140 MPa
Flexural moduls (BNS EN ISO 178	min. 3400MPa
Elongation at break (BNS EN ISO 527-1,2)	min.2%
HDT (BNS EN ISO 75-1,2)	min.67°C
Hardness at 25°C (Barcol) (ASTM D 2583)	min.50
Water absorption (24 hours) (ISO 62)	max.0.2%

Solubility: It dissolves in Styrene and Acetone.

Application: Unsaturated Polyester resin Vinalkyd 550 PE-R hardens after the following hardening system:
Add 10 g Co-2% and 20 g MEKP-50(Butanox M-50) to 1000 g resin. The mixture should be well homogenized and then used for preparation of the articles. The viability of the mixture is from 7 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 time of gelling.

Package:
- metal conic cans 22 L, with polyethylene insert, of net weight of 20 kg ±150g;
- zinced barrels of 200 L , of net weight of 200 kg and allowed diversion of ±0,5%;
- cisterns from stainless steel or Aluminium.

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! Don't allow direct contact of organic peroxides with accelerators when using, transporting and storing.

Safety instructions, ecology

Check up MSDS

Orgachim®

7000 Rousse, 21 "Treti mart", blvd., tel. 082 / 886 303; fax 082 / 886 257
www.orgachim.bg