

VINALKYD 550 R 62 LSE



Orthophthalic unsaturated polyester resin

Description: It is a low viscosity, high reactive, non-accelerated, non-tixotropic orthophthalic unsaturated polyester resin design for general purpose and glass reinforced application (GRP). Contains special additive for decreasing of styrene emissions in a work environment.

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-1% 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) | Light opalescent Liquid |
| Non-volatile content: (BNS EN ISO 3251) | 62±1% |
| Reactivity at 23°C: (1 g Co-1% and 2 g Butanox M-50) | |
| - gelling time from 23°C to 35 °C | 10 - 20 min |
| - hardening time from 23°C to Tmax | 15 - 35 min |
| - temperature maximum/Tmax | 170-190°C |
| (Test Method) | |
| Viscosity Brookfield at 23°C: (sp.2, 50 rpm) (ISO 2555) | 500-600 mPa.s |

Acid number:
(BNS EN ISO 3682)

max 30 mgKOH/g

ADDITIONAL INFORMATION

Density at 20°C:
(BNS ISO 2811-1)

1,1 g/cm³

Flash point, covered pot:
(BNS ISO 2719)

34°C

Modifications:

A (accelerated)

Physical-mechanical properties

Hardening condition: 24h at room temperature
Post-curing: 16 h at 40°C

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Value

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

min.68 MPa

Flexural strength:
(BNS EN ISO 178)

min.130 MPa

Flexural modulus:
(BNS EN ISO 178)

min.3400MPa

Elongation at break:
(BNS EN ISO 527-1,2)

min. 2.2%

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

min. 68°C

Hardness at 25°C (Barcol):
(ASTM D 2583)

min.45

Water absorption (24 hours):
(ISO 62)

max.0.2%

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- Solubility:** It dissolves in styrene and acetone.
- Application:** Unsaturated polyester resin Vinalkyd 550 R 62 LSE hardens after the following hardening system:
Add 10 g Co-1% 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 10 to 20 minutes and depends on the temperature of the resin, as the process of gelling accelerates additionally at temperature higher than 23°C, and the lower temperature slows down the time of gelling.
- Package:** In metal conic cans 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 from 18°C up to 25°C.
In case of separation the system has to be homogenized before usage.
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.
- 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 R 62 LSE. 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.

Orgachim Resins®

Ruse 7000, 21 Treti mart Blvd., tel.: +359 82 886 340; fax: +359 82 886 340
www.orgachimresins.bg