

NEUKADUR EP 571 N

Epoxy Laminating Resin

altropol

Main features

- low-viscous
- high mechanical properties in connection with NEUKADUR Hardener T3
- curing in thick layers with NEUKADUR Hardener VG L and NEUKADUR Hardener LG

Applications

- laminating resin
- formulation of gel coats, casting compounds or highly filled backfillings in connection with mineral or metallic fillers
- by addition of fillers (slate flour, chalk etc.) you can backfill patterns in thicknesses of 4-10 cm

Properties in the non-crosslinked state (approx. values)

| | | NEUKADUR EP 571 N | NEUKADUR Hardener T 3 | NEUKADUR Hardener VG L | NEUKADUR Hardener LG |
|----------------|-------------------|-------------------|-----------------------|------------------------|----------------------|
| Colour | | amber | amber | amber | light-brown |
| Mixing ratio | p.b.w. | 100 | 20 | 30 | 50 |
| Density | g/cm ³ | 1.16 | 0.95 | 0.95 | 0.95 |
| Viscosity 20°C | mPa·s | 2,500 | 200 | 150 | 350 |

Properties of the mixture (approx. values)

| | | | | | |
|----------------------|-----------------|--|-------|-------|-------|
| Mixed viscosity 20°C | mPa·s | | 1,500 | 1,000 | 1,000 |
| Pot life 20°C | (1000 g) min | | 35 | 180 | 250 |
| Curing time 20°C | hours | | 18 | 36 | 36 |

Data of the cured product (approx. values) – tempered for 4 hours at 80°C

| | | | | | |
|----------------------------------|-------------------|-----------|-------|-------|-------|
| Shore D-hardness | points | DIN 53505 | 85 | 85 | 70 |
| Density | g/cm ³ | DIN 53479 | 1.1 | 1.1 | 1.1 |
| Tensile strength | N/mm ² | DIN 53455 | 75 | 75 | 55 |
| Elongation at break | % | DIN 53455 | 3 | 3 | 3 |
| Modulus in tension | N/mm ² | DIN 53457 | 3,600 | 3,600 | 2,300 |
| Flexural strength | N/mm ² | DIN 53452 | 145 | 145 | 45 |
| Compressive strength | N/mm ² | DIN 53454 | 115 | 115 | 70 |
| Ball indentation hardness 30'' | N/mm ² | DIN 53456 | 170 | 170 | 65 |
| Impact strength | kJ/m ² | DIN 53453 | 11 | 11 | 13 |
| Dimensional stability under heat | Martens °C | DIN 53458 | 70 | 70 | 35 |
| Linear dimensional change | mm/m | | - 0.5 | - 0.5 | - 0.5 |

Laminating values with 10 layers of glass filament fabric type Interglas 92 140 glass content 45 – 50 % / 3 h 120°C

(approx. values)

| | | | | | |
|--|-------------------|-----------|--------|--------|--|
| Flexural strength at room temperature | | | | | |
| 40°C | mPa·s | ISO R 178 | 400 | 400 | |
| 60°C | | | 385 | 385 | |
| 80°C | | | 330 | 330 | |
| | | | 325 | 325 | |
| Tensile strength | N/mm ² | DIN 53455 | 260 | 260 | |
| Modulus in tension | N/mm ² | DIN 53457 | 24,600 | 24,600 | |
| Compressive strength | N/mm ² | LP method | 350 | 350 | |
| Linear dimensional change before tempering | mm | | - 0.2 | - 0.2 | |
| Linear dimensional change after tempering | mm | | - 0.75 | - 0.75 | |

How to process the material

The indicated mixing ratios have to be observed. Mix resin and hardener intensively (by hand for approx. 3 minutes). When using pulverulent or fibroid fillers, mix at first resin and hardener, then add the fillers (dry and free from grease).

The pot life is temperature-dependent and variable by the choice of the NEUKADUR Hardener (see table).

For release agents, please visit our homepage under <http://www.altropol.de/en/produkte/weitere-produkte/trennmittel>

Form of delivery

| | | | | | |
|------------------------|---------|----------|----------|----------|-----------|
| NEUKADUR EP 571 N | 5.00 kg | 10.00 kg | 25.00 kg | 30.00 kg | 220.00 kg |
| NEUKADUR Hardener T 3 | 1.00 kg | 5.00 kg | 6.00 kg | 10.00 kg | 25.00 kg |
| NEUKADUR Hardener VG L | 1.00 kg | 5.00 kg | | | 25.00 kg |
| NEUKADUR Hardener LG | 1.00 kg | 5.00 kg | | | 25.00 kg |

Storage

We recommend keeping the material in tightly closed original receptacles at temperatures of 20 – 25 °C. When duly stored, the material can be used within the shelf life indicated on the labels (the first 2 digits of the batch number indicate the week, the 3rd digit indicates the year).

Measure of precaution

With the aid of the current safety data sheets, which contain physical, ecological, toxicological and other data relating to safety, the user can inform himself on the safe handling and storage of the products.

Our technical service - in words, in writing or by trials - is given according to the current state of our knowledge. It does however not relieve the customer/user from the duty to check by himself if the products supplied by us are suitable for the intended processes and purposes. Application, use and processing of the products take place beyond our control possibilities and lie therefore exclusively in the area of responsibility of the processor. Any existing property rights of third parties are to be considered. We guarantee the perfect quality of our products in accordance with our general terms and conditions of business. When handling our products you have to observe the legal rules and the rules for the industrial hygiene. As for the rest, we refer to the corresponding safety data sheets.

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