NEUKADUR ProtoFlex HS 90

2-C PUR Vacuum Casting System
Elastomer

altropol

Main features

- medium-viscous
- processible by hand and machine
- fast curing
- pot life individually adjustable
- high dimensional stability under heat

Applications

- prototyping
- production of technical parts
- small-lot production

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

		NEUKADUR ProtoFlex HS 90 Comp. A	NEUKADUR ProtoFlex HS 90 Comp. B
Colour		neutral	transparent yellow
Mixing ratio	p.b.w.	100	50
Density 20 °C	g/cm^3	1.00	1.20
Viscosity 25 °C	mPa·s	2,200	800

Properties of the mixture (approx. values)

Mixed viscosity 25 °C	mPa·s		1,500
Pot life 20 °C	minutes		7
Demoulding time 70 °C	minutes		60
Hardness	Shore A	DIN 53505	90
Colour			yellowish

Mechanical values (approx. values after 4 h 80 °C)

Tensile strength	MPa	DIN 53455	14
Tensile elongation	%	DIN 53455	1,600
Resistance to tear propagation	N/mm	ASTM D 624 B	50
Dimensional stability under heat	°C	HDT	120
Linear dimensional change (after storage 4 h 80 °C and 1 year RT)	%	500 x 50 x 10 mm	1.4

How to process the material

Preheat casting mould and/or tool to 70 °C and degas the resin under full vacuum for 15 - 30 minutes.

Mix Comp. A and Comp. B under full vacuum for approx. 90 seconds. For casting, reduce the vacuum to approx. 80 - 100 mbars.

The indicated mechanical values are only obtained after the above described tempering. The pot life becomes shorter when the resin is heated.

The pot life can be extended individually by addition of the pot life retarder NEUKADUR ProtoFlex HS 90 L.
For further information on this subject, please contact our application engineers.

Proportion of NEUKADUR ProtoFlex HS 90	Proportion of NEUKADUR ProtoFlex HS 90 L	Pot life in minutes	Demoulding time in minutes
75 %	25 %	8 - 10	45 - 90
50 %	50 %	12 - 14	60 - 100

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

NEUKADUR ProtoFlex HS 90 can also be coloured.

For this, we recommend the use of our AltroColor colour pastes which are available in all current basic colours.

Colours of other producers should be tested for their suitability prior to use.

Form of delivery

NEUKADUR ProtoFlex HS 90 Comp. A	1 kg	5 kg	25 kg	
NEUKADUR ProtoFlex HS 90 Comp. B	0.5 kg	2.5kg	5 kg	12.5 kg
NEUKADUR ProtoFlex HS 90 L	1 kg	5 kg	25 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 3th 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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