

NEUKADUR ProtoFlex HS 90

2-C PUR Vacuum Casting System
Elastomer

altropol

Main features

- medium-viscous
- can be processed by hand and machine
- quick-curing
- pot life individually adjustable

Applications

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

			ProtoFlex HS 90 Comp. A	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 mPas	(25 °C)		2,200	800
Mixed viscosity	(25 °C)			1,500
Pot life in minutes	(20 °C)			5-6*
Demouldable (min)	(70 °C)			30 - 60

* ProtoFlex HS 90 L = approx. 20 min

Mechanical values (approx. values after 1d RT + 4h 80 °C)

Hardness	Shore A	DIN 53505		90
Colour				yellowish
Tensile strength	MPa	DIN 53455		14
Tensile elongation	%	DIN 53455		1,600
Resistance to tear propagation	N/mm	DIN 53515		50
Bending elongation	%	DIN 53452		---
Modulus in flexure	MPa	DIN 53457		---
Impact strength	KJ/m ²	DIN 51230		---
Dimensional stability under heat	°C	HDT		120
Linear shrinkage	% approx.	500 x 50 x 3 mm		---

How to process the material

Preheat casting mould / tool to 70 °C and degas the resin under full vacuum for 15 - 30 minutes. Mix components A and B under full vacuum for approx. 90 seconds. For casting, reduce the vacuum to approx. 80 – 100 mbar. 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 of NEUKADUR ProtoFlex HS 90 can be extended individually by addition of the pot life retarder NEUKADUR ProtoFlex HS 90 L. Should you need more detailed information, please let us know. Our application engineers will then advise you accordingly.

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Proportion of ProtoFlex HS 90	Proportion of ProtoFlex HS 90 L	Pot life [min]	Demouldable [min]
75 %	25 %	8 - 10	45 - 90
50 %	50 %	12 - 14	60 - 100

NEUKADUR ProtoFlex HS 90 can also be dyed. For this, we recommend the use of the AltroColor dye pastes which are available in the mostly required fundamental colours. Colour inks of other producers should be tested for their suitability before use.

Form of delivery

NEUKADUR ProtoFlex HS 90	1.0 and 5.0 kg
NEUKADUR ProtoFlex HS 90 L	1.0 and 5.0 kg
NEUKADUR ProtoFlex HS 90 Comp. B	0.5 and 2.5 kg

Storage

The material should be kept in tightly closed original receptacles at temperatures above 20 °C. When duly stored, the materials can be used within the shelf life indicated on the labels. We recommend, however, using up opened receptacles as soon as possible.

Measure of precaution

Users should make use of the current safety data sheets, which contain physical, ecological, toxicological and other data relating to safety, to inform themselves on the safe handling and storage of the products.

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