NEUKADUR ProtoFlex 190-05

2-C PUR Casting System Elastomer



Main features

- very high elongation
- high restoring force
- processible by hand and machine
- very good flowability
- very fast curing
- also usable as vacuum casting resin

Applications

- prototyping
- production of technical parts
- moulds and patterns

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

		NEUKADUR	NEUKADUR	NEUKADUR
		ProtoFlex 190-05	Hardener PTG 1	Hardener PTG 8
Colour		light beige or black	light amber	amber
Mixing ratio	p.b.w.	100	54	17
Density (20 °C)	g/cm³	0.95	1.20	1.20
Viscosity (25 °C)	mPa∙s	5000	100	300

Properties of the mixture (approx. values)

Mixed viscosity (25 °C)	mPa∙s		2,000	2,400
Pot life (20 °C)	min		5	5
Demoulding time (70 °C)	hours		4	5
Hardness	Shore A	DIN 53505	90	90
Colour			light amber or black	light amber or black

Mechanical values (approx. values after 1 h 80 °C)

Tensile strength	MPa	DIN 53455	10	16
Tensile elongation	%	DIN 53455	120	170
Resistance to tear propagation	N/mm	ASTM D 624 B	50	65
Dimensional stability under heat	Martens °C	DIN 53458	80	80

How to process the material

NEUKADUR ProtoFlex 190-05 as well as the hardeners NEUKADUR Hardener PTG 1 and NEUKADUR Hardener PTG 8 are sensitive to low temperatures and crystallize out at temperatures below +15 $^{\circ}$ C. This occurrence is reversible at approx. 30 – 60 $^{\circ}$ C.

The pot life as well as the demoulding time can be shortened by addition of the NEUKADUR catalyst UL 10 %.

For the individual adjustment of the Shore A degree of hardness, NEUKADUR ProtoFlex 190-05 can be mixed with NEUKADUR ProtoFlex 110-05 or NEUKADUR ProtoFlex 150-05. For the exact quantitative proportions, please refer to our separate mixing table. The lower the adjustment of the Shore hardness, that means the more the proportion of NEUKADUR ProtoFlex 110-05 increases in the mixture with NEUKADUR ProtoFlex 190-05, the shorter becomes the pot life, e. g. a 1:1 mixture of NEUKADUR ProtoFlex 110-05 and NEUKADUR ProtoFlex 190-05 has now a pot life of 2 to 3 minutes only. In this case, however, the curing time, too, shortens significantly.

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Stir up NEUKADUR ProtoFlex 190-05 thoroughly before use.

The indicated mechanical values are only obtained after the above described tempering.

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

Form of delivery

NEUKADUR ProtoFlex 190-05	1.00 kg	5.00 kg
NEUKADUR Hardener PTG 1	0.54 kg	1.00 kg
NEUKADUR Hardener PTG 8	0.65 kg	3.75 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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