

# NEUKADUR ProtoCast 225

2-C PUR Vacuum Casting System  
transparent, UV-resistant

# altropol

## Main features

- properties similar to those of PMMA
- transparent, colourless
- resistant to yellowing
- high thermal stability
- very quick-curing

## Applications

- prototyping
- production of technical parts
- production of decorative items

			ProtoCast 225 Comp. A	ProtoCast 225 Comp. B
Colour			transparent colourless	transparent colourless
Mixing ratio	p.b.w.		100	130
Density 20 °C	g/cm <sup>3</sup>		1.03	1.07
Viscosity mPas	(25°C)		850	25
Mixed viscosity	(25°C)			110
Pot life in minutes	(20°C)			7
Demouldable (min)	(70°C)			30 - 45

## Mechanical values (approx. values after 1d RT + 2h 80°C)

Hardness	Shore D	DIN 53505		80
Colour				transparent colourless
Tensile strength	MPa	DIN 53455		54
Tensile elongation	%	DIN 53455		27
Flexural strength	MPa	DIN 53452		90
Bending elongation	%	DIN 53452		12
Modulus in flexure	MPa	DIN 53457		2,300
Impact strength	KJ/m <sup>2</sup>	DIN 51230		---
Dimensional stability under heat	°C	HDT		95
Linear shrinkage	% approx.	500 x 50 x 3 mm		0.26

## How to process the material

Preheat casting mould / tool to 70°C, Comp. A to approx. 45°C and degas and/or dehydrate 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. 100 – 200 mbar. The indicated mechanical values are only obtained after the above described tempering. Heating shortens the pot life. At 35°C, it is 5 minutes only. Heating to 50°C leads to a shortening of the pot life to not more than 3 minutes.

The pot life of NEUKADUR ProtoCast 225 can be prolonged individually by the addition of the pot life

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retarder NEUKADUR ProtoCast 225L. The mixture retarded in reaction shows a heavy turbidity (incompatibility of the components) at the beginning. However, this turbidity disappears after a short period of time (depending on the temperature and proportion of PC 225L). For further information on this subject, please contact our application engineers.

NEUKADUR ProtoCast 225 Comp. B is sensitive to low temperatures and may become turbid. This occurrence is reversible at approx. 45°C.

NEUKADUR ProtoCast 225 can be dyed ideally. For this, we recommend the use of AltroColor dye pastes which are available in the common basic colours. Colour inks of other manufacturers should be tested for their suitability before use.

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### Form of delivery

NEUKADUR ProtoCast 225 Comp. A	0.77 kg
NEUKADUR ProtoCast 225 L	0.77 kg
NEUKADUR ProtoCast 225 Comp. B	1 kg

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### Storage

The material should be kept in tightly closed original receptacles at temperatures above 20 °C. NEUKADUR ProtoCast 225 Comp. A and/or ProtoCast 225L are very sensitive to humidity. When duly stored, the materials can be used within the shelf life indicated on the labels. We recommend, however, using up the opened receptacle as soon as possible.

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### 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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