

NEUKADUR ProtoCast 120

2-C PUR Vacuum Casting System

PA / ABS

altropol

Main features

- properties similar to those of PA / ABS
- low-viscous
- high dimensional stability under heat
- very high impact strength
- very quick-curing

Applications

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

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

		NEUKADUR ProtoCast 120 Comp. A	NEUKADUR ProtoCast 120 Comp. B 1	NEUKADUR ProtoCast 120 Comp. B 2
Colour		milky yellow or black	transparent colourless	transparent colourless
Mixing ratio	p.b.w.	65	100	100
Density 20°C	g/cm ³	1.00	1.20	1.20
Viscosity 25°C	mPa·s	500	1.200	550

Properties of the mixture (approx. value)

Mixed viscosity 25°C	mPa·s		750	530
Pot life 20°C	minutes		11	7
25°C			10	6
40°C			5	3
Demouldable 70°C	minutes		30-60	30-60
Hardness	Shore D	DIN 53505	84	84
Colour			beige / black	beige / black

Mechanical values after 1 h 80°C/ 1 h 100°C/ 2 h 110°C (approx. value)

Tensile strength	MPa	DIN 53455	55	67
Tensile elongation	%	DIN 53455	6	8
Flexural strength	MPa	DIN 53452	100	110
Bending elongation	%	DIN 53452	10	11
Modulus in flexure	MPa	DIN 53457	1.700	2.000
Impact strength	KJ/m ²	DIN 51230	70	50
Dimensional stability under heat	°C	HDT	110	130
Linear shrinkage	%	500 x 50 x 3 mm	0,4	0,3

How to process the material

NEUKADUR ProtoCast 120 has to be homogenized thoroughly before use. Preheat casting mould / tool to 70°C, Comp. A/ Comp. B to approx. 40°C. It is also possible to heat up Comp. A only to 40°C, the 40°C pot life prolongs by approx. 1-2 minutes.

Degas component A under full vacuum for approx. 15-20 minutes, then mix both components intensively with each other according to the mixing ratio. For casting, reduce the vacuum to approx. 100mbar. The indicated mechanical values are only obtained after the above described tempering.

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Form of delivery

NEUKADUR ProtoCast 120 Comp. A	0.65 kg	1.95 kg
NEUKADUR ProtoCast 120 Comp. B 1	1.00 kg	3.00 kg
NEUKADUR ProtoCast 120 Comp. B 2	1.00 kg	3.00 kg

Storage

The material should be kept in tightly closed original receptacles at temperatures of 15 – 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

User 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 products.