

NEUKADUR ProtoAmid 70

2-C PUR Vacuum Casting System

PA 6

altropol

Main features

- properties similar to those of PA 6
- medium-viscous
- can be processed by hand and machine
- very high impact strength
- very high dimensional stability under heat

Applications

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

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

		NEUKADUR ProtoAmid 70	NEUKADUR ProtoAmid Komp. B 2	NEUKADUR ProtoAmid Comp. B 4	NEUKADUR ProtoAmid Comp. B 10
Colour		transparent amber	transparent brown	transparent brown	transparent brown
Mixing ratio	p.b.w.	100	45	50	55
Density (20 °C)	g/cm ³	1.00	1.15	1.17	1.15
Viscosity (25 °C)	mPa·s	6,000	130	400	700

Properties of the mixture (approx. values)

Mixed viscosity (25 °C)	mPa·s		2,000	2,000	3,000
Pot life	minutes		2	4	10
Demoulding time (70° C)	minutes		35	45	120
Hardness	Shore D	DIN 53505	73	73	72

Mechanical values (approx. values after 5 h 80 °C)

Tensile strength	MPa	DIN 53455	38	38	36
Tensile elongation	%	DIN 53455	50	50	50
Flexural strength	MPa	DIN 53452	55	55	55
Bending elongation	%	DIN 53452	24	24	24
Modulus in flexure	MPa	DIN 53457	680	660	580
Impact strength	KJ/m ²	DIN 51230	>150	>150	>150
Dimensional stability under heat	°C	HDT	150	140	130
Linear shrinkage	%	500 x 50 x 25 mm	----	0.55	0.85

How to process the material

NEUKADUR ProtoAmid 70 tends to crystallize out. In this case, it has to be melted and homogenized at approx. 90 °C before processing.

NEUKADUR ProtoAmid 70 has to be homogenized thoroughly before use. Preheat casting mould / tool to 70 °C. Deaerate NEUKADUR ProtoAmid 70 for 5 – 10 minutes under full vacuum, then mix resin and the desired hardener intensively with each other according to the indicated mixing ratio. For casting, reduce the vacuum to approx. 50 mbar.

The indicated mechanical values are only obtained after the above described tempering. Alternatively we have also available the hardener NEUKADUR ProtoAmid Comp. B 2 with which one can achieve further improved mechanical and chemical resistances. For casting with NEUKADUR ProtoAmid Comp. B 2 or NEUKADUR ProtoAmid Comp. B 4, we recommend the use of a pressure differential facility.

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

Form of delivery

NEUKADUR ProtoAmid 70	1.00 kg	5.00 kg		
NEUKADUR ProtoAmid Comp. B 2	0.45 kg	0.50 kg	1.25 kg	2.50 kg
NEUKADUR ProtoAmid Comp. B 4	0.50 kg	2.50 kg		
NEUKADUR ProtoAmid Comp. B 10	0.55 kg	2.75 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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