

Main features

- properties similar to those of ABS
- medium-viscous
- processible by machine
- very fast curing
- very high modulus in flexure

Applications

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

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

		NEUKADUR ProtoRIM 111 R Comp. A	NEUKADUR ProtoRIM 111 R Comp. B
Colour		light beige or black	brown
Mixing ratio	p.b.w.	100	100
Density (20 °C)	g/cm ³	1.00	1.20
Viscosity (25 °C)	mPa·s	2,000	150

Properties of the mixture (approx. values)

Mixed viscosity (25 °C)	mPa·s		1.000
Pot life	seconds		55
Demouldable (20 °C) 3-5 mm	minutes		13
Hardness	Shore D	DIN 53505	80
Colour			light ivory or black

Mechanical values after 4 h 80 °C (approx. values)

Tensile strength	MPa	DIN 53455	57
Tensile elongation	%	DIN 53455	19
Flexural strength	MPa	DIN 53452	86
Bending elongation	%	DIN 53452	6
Modulus in flexure	MPa	DIN 53457	1,650
Impact strength	KJ/m ²	DIN 51230	19
Dimensional stability under heat	°C	HDT	100
Linear dimensional change	%	500 x 50 x 3 mm	0.30

How to process the material

To achieve optimal results, process NEUKADUR ProtoRIM 111 R ideally in 2-component low-pressure casting machines.

Stir up NEUKADUR ProtoRIM 111 R thoroughly before use.

By adding NEUKADUR ProtoRIM VZ you can prolong the pot life.

NEUKADUR ProtoRIM 111 R may crystallize out at temperatures below 18 °C.

This appearance is reversible. To get there, keep the material at 80 °C for several hours and consider the elevated vapour pressure of the isocyanate (use exhauster, if necessary).

When you want to cast layers of higher thicknesses or more important volumes, NEUKADUR ProtoRIM 111 R has to be retarded with NEUKADUR ProtoRIM VZ in order to reduce the reactivity of the system.

Without NEUKADUR ProtoRIM VZ (see particular data sheet), shrinkage effects and sink marks may occur to the casting in case of layer thicknesses of > 3 mm.

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 ProtoRIM 111 R Comp. A	1 kg	30 kg	200 kg
NEUKADUR ProtoRIM 111 R Comp. B	1 kg	30 kg	200 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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