

NEUKADUR ProtoRIM 180 R

2 C-PUR RIM System

ABS

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Main features

- Properties similar to those of ABS
- medium-viscous
- processable by machine
- very quick-curing
- very high dimensional stability under heat

Applications

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

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

			ProtoRIM 180 R Comp. A	ProtoRIM 180 R Comp. B
Colour			light beige *	brown
Mixing ratio	p.b.w.		100	80
Density 20 °C	g/cm ³		1.03	1.20
Viscosity mPas	(25°C)		1,500	200
Mixed viscosity	(25°C)			1,200
Pot life in seconds	(20°C)			35 - 45
Demouldable (min)	(20°C, 1 - 3 mm)			10 - 15

* also available in black (dyed)

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

Hardness	Shore D	DIN 53505		80
Colour				light ivory *
Tensile strength	MPa	DIN 53455		34
Tensile elongation	%	DIN 53455		30
Flexural strength	MPa	DIN 53452		58
Bending elongation	%	DIN 53452		17
Modulus in flexure	MPa	DIN 53457		1,000
Impact strength	KJ/m ²	DIN 51230		28
Dimensional stability under heat	°C	HDT		180 **
Linear shrinkage	% approx.	500 x 50 x 3 mm		0.35

* also available in black (dyed)

** after tempering

How to process the material

ProtoRIM 180 R has to be homogenized thoroughly before use.

To obtain optimal results, NEUKADUR ProtoRIM 180 R is ideally processed in 2-component low-pressure casting machines.

The impact strength can be improved considerably by the addition of for example ProtoRIM 100 R Comp. B to the ProtoRIM 180 R Comp. B while you can still achieve very good dimensional stabilities under heat. The pot life, too, can be extended on request by the addition of the NEUKADUR ProtoRIM VZ.

When layers of more than 1 - 3 mm thickness or more important volumes shall be cast, ProtoRIM 180 R Comp. A has to be retarded with ProtoRIM VZ in order to reduce the reactivity of the system. When processing ProtoRIM 180 R Comp. A/B without ProtoRIM VZ (see particular data sheet) in layer thicknesses of > 3 mm, shrinkage effects and sink marks may occur to the casting.

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

We recommend tempering the moulded parts step by step as per the two a/m formulations in a "bed of sand grit or aluminum grit": e. g. 2 h 80°C, 2 h 100°C, 2 h 120°C, 2 h 140 °C→ cooling-down in the supporting bodies.

(*h = hours*)

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

Form of delivery

NEUKADUR ProtoRIM 180 R Comp. A	5 kg	10 kg	25 kg	215 kg
NEUKADUR ProtoRIM 180 R Comp. B	4 kg	8 kg	20 kg	180 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 you from the duty of check by yourselves 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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