

NEUKADUR MultiCast 15

2-C PUR-Fast-Cast System

Binder with a long pot life and a high dimensional stability under heat

altropol

Main features

- low-viscous
- easy to process
- low shrinkage
- very good through-curing with a long pot life
- high temperature stability

Applications

- production of negatives/positives
- universally for all kinds of moulds and patterns
- vacuum deep-drawing tools and milling supports

Before mixing, please do read the paragraph “How to process the material” (see below).

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

		MultiCast 15	Hardener ISO 3	Unfilled mixture	Mixture filled with filler B
Colour		beige	brown		
Mixing ratio	p.b.w.	100	170	-	300
Density 20 °C	g/cm ³	1.04	1.10	1.05	1.6
Viscosity mPas	room temperature	820	100	170	4100
Pot life/min	room temperature			14 - 15	15 - 20

Mechanical and other specifications (approx. values)

			Unfilled mixture	Filled mixture
Hardness	Shore D	DIN 53505	80	85
Colour			beige	brown
Tensile strength	MPa	DIN 53455	16	24
Tensile elongation	%	DIN 53455	13	6
Flexural strength	MPa	DIN 53452	27	40
Bending elongation	%	DIN 53452	4	1.5
Modulus in flexure	MPa	DIN 53457	725	3250
Linear shrinkage	% approx.	500 x 50 x 25 mm	-	0.10
Coefficient of linear expansion (16 h 80°C)	10 ⁻⁶ K ⁻¹	DIN 53752		86
Temperature stability 10 mm layer thickness	°C		-	130
20 mm layer thickness	°C		-	140
Demouldable at 25 °C 4 – 5 mm	Hours		24	4
30 – 40 mm	Hours		-	2.5

How to process the material

Before using MultiCast 15, mix the same thoroughly until it has got a homogeneous appearance. Mix both components thoroughly with each other at room temperature (> 18°C) according to the indicated mixing ratio. Before casting, make sure that the parts and moulds are free from humidity and non-evaporated release agent.

As fillers we recommend filler B (ceramic) or filler AL (aluminium powder). For the above mentioned example with 300 p.b.w. of filler it makes sense to stir 100 p.b.w. of filler into the MC 15 and 200 p.b.w. of

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filler into the ISO 3. Then let the mixture rest for approx. 40 – 45 minutes for vaporization purposes. After a short stirring time, transfer the mixture of MC 15 and filler as quantitatively as possible to the filled ISO 3 mixture and mix both compounds thoroughly with each other for 1 to 2 minutes. Repotting helps to prevent mixing faults. After another 2 minutes, stir once again thoroughly, then proceed to casting. If the mixing time is too short, it may happen that the filler deposits and the casting only cures insufficiently or that it does not cure at all (incompatibility).

Form of delivery

NEUKADUR MultiCast 15	1 kg, 5 kg, 10 kg, 30 kg
NEUKADUR Hardener ISO 3	1.7 kg, 8.5 kg, 17 kg, 34 kg

Storage

The material should be kept in tightly closed original receptacles at temperatures of 15 - 25 °C. When duly stored, the materials can be used within the shelf life indicated on the labels.

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 products.