RAKU® TOOL

PC-3414 / PH-3915

Casting Resin

Polyurethane Casting System

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Key Properties Applications

- Can be cast in thick layers and large volumes
- Low exothermic even with thick layers
- Superior interlayer adhesion
- · Easily workable
- · Can be filled additionally

- Backing casting of models, molds, negatives and general support aids
- Direct casting of foundry patterns
- Jigs

Processing Properties

		Unit	PC-3414	PH-3915
Color	visual		beige	amber
Mix ratio		pbw	100	20
Mix ratio		pbv	100	29
Density	DIN 2811-1	g/cm³	ca. 1.79	ca. 1.24
Viscosity at 25 °C	DIN 53019-1	mPa·s	30,000 - 50,000	150 - 200

		Unit	PC-3414 / PH-3915
Mix viscosity at 25 °C	DIN 53019-1	mPa·s	2,000 - 3,000
Pot life at 25 °C	1000 ml	min	60 - 75
Max. layer thickness		mm	100
Demold time		h	14

Cured / Mechanical Properties

Cure		Unit	PC-3414 / PH-3915 7 days at RT or 14h at 40°C
Color		visual	beige
Density	ISO 1183	g/cm³	ca. 1.70
Hardness	ISO 868	Shore D	80 - 85
Deflection temperature, HDT	ISO 75	°C	50 - 55
Compressive strength	ISO 604	MPa	80 - 85
Compressive modulus	ISO 604	MPa	5,300 - 5,800
Flexural strength	ISO 178	MPa	45 - 50
Flexural modulus	ISO 178	MPa	6,300 - 6,800
Linear shrinkage*		mm/m	ca. 1.40

^{*}measured on maximum layer thickness as stated above

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Processing

The processing temperature and material temperature should be between 20-25°C.

The A component needs to be stirred well before use as some fillers might be prone to sedimentation.

Mix the components thoroughly in the ratio indicated, avoiding any air entrapment.

Degassing and / or post curing will improve final properties.

Packaging	
RAKU® TOOL PC-3414	10 kg
RAKU® TOOL PH-3915	2,0 kg

Storage

In temperature controlled environments (20°C - 25°C) the original containers can be stored for at least 6 months. Both components are moisture sensitive and containers therefore need to be kept tightly sealed. The storage temperature for both components should not be below 20°C as at 15°C partial crystallization might occur.

Handling precautions

Good workplace ventilation is to be ensured during processing. At the same time, the employer's liability insurance association's industrial hygiene safety regulations regarding the handling of reaction resins and their hardeners are to be observed. Please take heed of the appropriate safety data sheets.

RAMPF Advanced Polymers GmbH & Co. KG Robert-Bosch-Str.8 - 10 | D-72661Grafenberg T+49.71 23.93 42-0

E advanced.polymers@rampf-group.com www.rampf-group.com

Our recommendations on the use of the material are based on many years of experience and current scientific and practical knowledge. They are, however, provided without any obligation on our part and do not relieve the buyer of the need for suitability tests. They do not constitute a legal relationship, nor are any protected third party rights whatsoever affected thereby. The technical data sheet is not a specification, but contains only approximate values.