

RAKU-TOOL[®] PC-3410 (Resin) / PH-3911 (Isocyanate), PC-3411 (Resin) / PH-3911 (Isocyanate) Casting Systems Two component Polyurea

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Key Properties

- Hand cast
- Good moisture resistance
- Long pot life
- No skull and crossbones label
- High elongation at break

Applications

- Structural molds
- Closed plaster molds for the ceramics industry
- Concrete molds
- Vibration absorption
- Assembly jigs
- Impact protection

Processing Properties

			PC-3410	PC-3411	PH-3911
Color	visual		Black	Black	Yellowish
Mix ratio		parts by weight	100		300
		parts by volume	100	100	1000
Density	ISO 1183	g/cm ³	1.09	1.20	1.06
Viscosity at 25 °C	ISO 2555	m Pa.s	1300-1800	500-600	4000-4500

			PC-3410 PH-3911	PC-3411 PH-3911
Mix viscosity at 25 °C	ISO 2555	m Pa.s	3800-4300	5000-5500
Pot life at 25 °C	1000 ml	min	85-95	50-55
Max. layer thickness		mm	50	50
Demold time		h	24	24

Cured / Mechanical Properties

Cure: 7 days at RT or 14h at 40°C			PC-3410 PH-3911	PC-3411 PH-3911
Appearance	visual		Black	Black
Density	ISO 1183	g/cm ³	1.1	1.1
Shore hardness A	ISO 868		40-45	80-85
Tensile strength	ISO 527	MPa	1.5-2.5	8-13
Elongation at break	ISO 527	%	600-650	680-730
Tear strength	DIN 53515	N/mm	13-18	35-40
Abrasion	Taber	mm ³ /100R	3-6	7-11

Customers can mix PC-3410 and PC-3411 to obtain a Shore A between 40 and 80.

Processing

The A component needs to be stirred well before use as some fillers might be prone to sedimentation. Mix the two components thoroughly in the ratio indicated.

Degassing and /or post-curing will improve final properties.

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

Packaging

RAKU-TOOL® PC-3410	5 kg, 20 kg
RAKU-TOOL® PC-3411	6 x 0.500 kg, 2 kg
RAKU-TOOL® PH-3911	5 kg, 20 kg

Storage

Original containers should be kept tightly sealed and stored at ambient temperatures (15°C to 30°C). If properly stored the products have the shelf-life indicated on the product label.

Partly used containers should always be sealed appropriately and used up as soon as possible.

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.
