

# RAKU-TOOL<sup>®</sup> PC-3451 (Resin) / PH-3952 (Isocyanate)

## Casting System

### Two component Polyurea

PC - Rev.-Status: 01- 2009/06/26

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**Key Properties**

- High abrasion resistance
- High impact strength
- Both components are without skull and crossbones label
- No brittle phase

**Applications**

- Foundry patterns
- Pattern plates
- Core boxes
- Impact protection
- Conveyor rollers

**Processing Properties**

			PC-3451	PH-3952
Color	visual		Light beige	Yellowish
Mix ratio		pb weight	100	60
		pb volume	100	66
Density	ISO 1183	g/cm <sup>3</sup>	1.20	1.09
Viscosity at 25 °C	ISO 2555	m Pa.s	4000-6000	800-1200

**PC-3451 / PH-3952**

			PC-3451 / PH-3952
Mix viscosity at 25 °C	ISO 2555	m Pa.s	3500-4500
Pot life at 25 °C	1000 ml	min	20-25
Max. Layer thickness		mm	10
Demold time		h	16

**Cured / Mechanical Properties****Cure: 7 days at RT or 14h at 40°C**

			PC-3451 / PH-3952
Appearance	visual		Light beige
Density	ISO 1183	g/cm <sup>3</sup>	1.1
Shore hardness D	ISO 868		60-65
Coefficient of thermal expansion	ISO 11359	10 <sup>-6</sup> K <sup>-1</sup>	110-120
Deflection temperature, HDT	ISO 75	°C	50-55
Compressive strength	ISO 604	MPa	-
Compressive modulus	ISO 604	MPa	300-400
Flexural strength	ISO 178	MPa	20
Linear shrinkage		mm / m	-
Abrasion	Taber	mm <sup>3</sup> /100R	50

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### 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.**

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### Packaging

RAKU-TOOL <sup>®</sup> PC-3451	5kg, 25kg, 200kg
RAKU-TOOL <sup>®</sup> PH-3952	3kg, 22,5kg, 200 kg

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### 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.

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### 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.

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