

Fast Cast System

Two component, unfilled polyurethane, can be filled with AC-9004

Key Properties

- Fast cure and fast demold
- Unfilled, very low viscosity
- Very good temperature resistance
- Improved moisture resistance
- High fill rate possible
- Very high strength

Applications

- Foundry patterns, core boxes, negatives, pattern plates
- Checking casts
- Replicas
- Vacuum forming molds
- Jigs

Processing Properties

			PF-3701-2	PH-3977	AC-9004
Color	visual		Milky white	Light yellow	White
Mix ratio		pb weight	100	100	300
		pb volume	100	86	-
Density	ISO 1183	g/cm ³	ca. 0.95	ca. 1.10	-
Viscosity at 25 °C	DIN 53019-1	mPa·s	115-130	70-80	-

			PF-3701-2 / PH-3977	PF-3701-2 / PH-3977 AC-9004
Pot life at 25 °C	1000 ml	min	5-6	6-7
Max. layer thickness		mm	20	80
Demold time (RT)		h	0.5-1	1.5-2

Cured / Mechanical Properties

Cure: 7 days at RT or 14h at 40°C			PF-3701-2 / PH-3977	PF-3701-2 / PH-3977 AC-9004
Appearance	visual		White	Beige
Density	ISO 1183	g/cm ³	ca. 1.0-1.1	ca. 1.6-1.7
Shore Hardness D	ISO 868		70-75	80-85
Deflection temperature, HDT	ISO 75	°C	60-70	70-80
Compressive strength	ISO 604	MPa	30-40	45-50
Compressive modulus	ISO 604	MPa	800-900	3000-3100
Flexural strength	ISO 178	MPa	30-40	35-45
Linear shrinkage		mm / m	n.a.	0.4

Processing

The processing 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. The fillers should first be mixed into the individual A and B components in a way so that the two components have about the same viscosity. This allows for easier and better mixing of the two components afterwards. With a bit of practice it is possible to mix small quantities of unfilled A and B and then add the filler without the pot life being too short for the casting process.

Packaging

RAKU-TOOL® PF-3701-2	6x1 kg / 4.5 kg / 20 kg
RAKU-TOOL® PH-3977	6x1 kg / 4.5 kg / 20 kg
RAKU-TOOL® AC-9004	20 kg / 1000 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.
