

Epoxy Casting System

High temperature resistance, aluminum filled

Key Properties

- High temperature resistance after post cure
- Room temperature hardening and demoldable
- Easily workable
- Good chemical resistance

Applications

- Vacuum forming molds
- Jigs
- Injection molds
- Foam molding tools

Processing Properties

			EC-2404	EH-2952-1
Color	visual		Gray	Clear
Mix ratio		parts by weight	100	11
Density	ISO 1183	g/cm ³	ca. 1.74	ca. 0.96
Viscosity at 25 °C	DIN 53019-1	mPa·s	20000-30000	20-50

			EC-2404 / EH-2952-1
Mix viscosity at 25 °C	DIN 53019-1	mPa·s	3300-4800
Pot life at 25 °C	1000 ml	min	100-120
Max. layer thickness		mm	60
Demold time		h	18

Cured / Mechanical Properties

Cure: 16h at RT + 14h at 120°C			EC-2404 / EH-2952-1
Appearance	visual		Gray
Density	ISO 1183	g/cm ³	ca. 1.7
Shore hardness D	ISO 868		85-90
Coefficient of thermal expansion	ISO 11359	10 ⁻⁶ K ⁻¹	40-45
Deflection temperature, HDT	ISO 75	°C	115-120
Glass Transition Temperature, Tg	DSC	°C	115-120
Compressive strength	ISO 604	MPa	120-125
Compressive modulus	ISO 604	MPa	7000-7500
Flexural strength	ISO 178	MPa	100-105
Flexural modulus	ISO 178	MPa	7300-7800
Linear shrinkage*		mm / m	0.1

*measured on maximum layer thickness as stated above

Processing

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

Mix the two components thoroughly in the ratio indicated. Degassing is recommended.

The mechanical properties and temperature resistance are only obtained through the post cure according to the recommended cure schedule.

Recommended cure schedule

After initial curing at room temperature for 12-24 hours depending on the size and thickness of the parts, the parts must be heated up to 120°C in steps and post cured for 14 hours at 120°C, then cooled down gradually. The curing time at room temperature, heating and cooling rate depend on the size and thickness of the parts.

Packaging

RAKU® TOOL EC-2404	5 kg / 25 kg
RAKU® TOOL EH-2952-1	3 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.
