

RAKU-TOOL[®] EC-2401 / EH-2904-1, EH-2905-1, EH-2906-1

Epoxy Casting System

With mineral fillers, variable reactivity

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Key Properties

- Reduced hazard rating
- Universally applicable
- Low sedimentation
- Flows very well
- Reactivity can be adjusted by using different hardeners
- Easily workable
- Good reproduction of detail

Applications

- Foundry patterns
- Copy models
- Direct casting (negatives)
- Jigs and fixtures
- Working models for the ceramics industry
- Galvano bath models

Processing Properties

			EC-2401	EH-2904-1	EH-2905-1	EH-2906-1
Color	visual		Ivory	Clear	Clear	Clear
Mix ratio		parts by weight	100	20		
			100		20	
			100			20
Density	ISO 1183	g/cm ³	1.75	1.00	1.01	1.01
Viscosity at 25 °C	ISO 2555	m Pa.s	90,000-120,000	90-130	80-120	40-80

			EC-2401 EH-2904-1	EC-2401 EH-2905-1	EC-2401 EH-2906-1
Mix viscosity at 25 °C	ISO 2555	m Pa.s	2800-3800	2500-3500	2000-2500
Pot life at 25 °C	1000 ml	min	45	90	180
Max. layer thickness		mm	10	20	80
Demold time		h	12	16	18

Cured / Mechanical Properties

Cure: 7 days at RT or 14h at 40°C			EC-2401 EH-2904-1	EC-2401 EH-2905-1	EC-2401 EH-2906-1
Appearance	visual		Ivory	Ivory	Ivory
Density	ISO 1183	g/cm ³	1.6	1.6	1.6
Shore hardness D	ISO 868		85-90	85-90	85-90
Coefficient of thermal expansion	ISO 11359	10 ⁻⁶ K ⁻¹	50-55	50-55	50-55
Deflection temperature, HDT	ISO 75	°C	53-58	43-48	45-50
Glass Transition Temperature, Tg	DSC	°C	53-58	45-50	48-53
Compressive strength	ISO 604	MPa	108-113	103-108	113-118
Compressive modulus	ISO 604	MPa	6300-6800	5800-6300	6300-6800
Flexural strength	ISO 178	MPa	83-88	78-83	88-93
Flexural modulus	ISO 178	MPa	6000-6500	5800-6300	6300-6800
Linear shrinkage*		mm / m	0.2	1.0	0.4

*measured on maximum layer thickness as stated above

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Processing

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® EC-2401	6 x 1.4 kg / 10 kg
RAKU-TOOL® EH-2904-1	6 x 0.280 kg / 2 kg / 25 kg
RAKU-TOOL® EH-2905-1	6 x 0.280 kg / 2 kg / 25 kg
RAKU-TOOL® EH-2906-1	6 x 0.280 kg / 2 kg / 25 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.
