

Epoxy Casting System

With metal fillers, variable reactivity

Key Properties

- Reduced hazard rating
- Universally applicable
- Low sedimentation
- Good mechanical properties
- Easy to pour
- Workable, hard surface
- Reactivity can be adjusted by using different hardeners

Applications

- Foundry patterns
- Copy models
- Metal forming
- General modeling

Processing Properties

			EC-2402	EH-2904-1	EH-2905-1	EH-2906-1
Color	visual		Black	Clear	Clear	Clear
Mix ratio		parts by weight	100	15		
			100		15	
			100			15
Density	ISO 1183	g/cm ³	ca. 2.84	ca. 1.00	ca. 1.01	ca. 1.01
Viscosity at 25 °C	DIN 53019-1	mPa·s	100000-200000	90-130	80-120	40-80

			EC-2402 EH-2904-1	EC-2402 EH-2905-1	EC-2402 EH-2906-1
Mix viscosity at 25 °C	DIN 53019-1	mPa·s	4000-5000	4000-5000	3000-4000
Pot life at 25 °C	1000 ml	min	35-45	70-80	200-230
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-2402 EH-2904-1	EC-2402 EH-2905-1	EC-2402 EH-2906-1
Appearance	visual		Black	Black	Black
Density	ISO 1183	g/cm ³	ca. 2.4	ca. 2.4	ca. 2.4
Shore hardness D	ISO 868		85-90	85-90	85-90
Coefficient of thermal expansion	ISO 11359	10 ⁻⁶ K ⁻¹	45-50	45-50	45-50
Deflection temperature, HDT	ISO 75	°C	48-54	43-48	48-53
Glass Transition Temperature, Tg	DSC	°C	55-60	50-55	45-50
Compressive strength	ISO 604	MPa	100-105	98-103	110-115
Compressive modulus	ISO 604	MPa	5800-6300	5800-6300	6300-6800
Flexural strength	ISO 178	MPa	85-90	88-93	98-103
Flexural modulus	ISO 178	MPa	6000-6500	5800-6300	6000-6500
Linear shrinkage*		mm / m	0.2	0.4	0.5

*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.

Packaging

RAKU® TOOL EC-2402	6 x 1.86 kg / 13.5 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.
