

EC-2402 / EH-2904-1, EH-2905-1, EH-2906-1

Epoxy Casting System

Metal filled with variable reactivity

Key Properties

- Universally applicable
- Low sedimentation
- Good mechanical properties
- Easy to pour
- Workable, hard surface
- Adjustable reactivity

Applications

- Foundry patterns
- Copy models
- Metal forming
- General mold making

Processing Properties

		Unit	EC-2402	EH-2904-1	EH-2905-1	EH-2906-1
Color	visual		black	yellowish	yellowish	yellowish
Mix ratio		pbw	100	15	-	-
Mix ratio		pbw	100	-	15	-
Mix ratio		pbw	100	-	-	15
Density	DIN 2811-1	g/cm ³	ca. 2.84	ca. 1.00	ca. 1.01	ca. 1.01
Viscosity at 25 °C	DIN 53019-1	mPa·s	100,000 - 200,000	90 - 130	80 - 120	40 - 80

		Unit	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	4,000 - 5,000	4,000 - 5,000	3,000 - 4,000
Pot life at 25 °C	1000 ml	min	35 - 45	70 - 80	200 - 230
Demold time		h	12	16	18
Max. layer thickness		mm	10	20	80

Cured / Mechanical Properties

		Unit	EC-2402 / EH-2904-1 7 days at RT or 14h at 40°C	EC-2402 / EH-2905-1 7 days at RT or 14h at 40°C	EC-2402 / EH-2906-1 7 days at RT or 14h at 40°C
Cure		visual	black	black	black
Color		visual	black	black	black
Density	ISO 1183	g/cm ³	ca. 2.40	ca. 2.40	ca. 2.40
Hardness	ISO 868	Shore D	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	5,800 - 6,300	5,800 - 6,300	6,300 - 6,800
Flexural strength	ISO 178	MPa	85 - 90	88 - 93	98 - 103
Flexural modulus	ISO 178	MPa	6,000 - 6,500	5,800 - 6,300	6,000 - 6,500
Linear shrinkage*		mm/m	ca. 0.20	ca. 0.40	ca. 0.50

*measured on maximum layer thickness as stated above



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Processing

The processing temperature 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	13,5 kg, 6 x 1,86 kg
RAKU® TOOL EH-2904-1	25 kg, 2 kg, 6 x 0,28 kg
RAKU® TOOL EH-2905-1	2 kg, 6 x 0,28 kg
RAKU® TOOL EH-2906-1	25 kg, 2 kg, 6 x 0,28 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.