

Epoxy Casting System

With metal fillers

Key Properties

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

Applications

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

Processing Properties

			EC-2402	EH-2902-1
Color	visual		Black	Clear
Mix ratio		parts by weight	100	15
Density	ASTM D-792	lb/ft ³ (g/cm ³)	ca. 177 (ca. 2.84)	ca. 60 (ca. 0.96)
Viscosity at 77°F (25°C)	ASTM D-2393	cP	100000-200000	1000-2000

			EC-2402 / EH-2902-1
Mix viscosity at 77°F (25°C)	ASTM D-2393	cP	25000-30000
Pot life at 77°F (25°C)	4.2 lbs	min	180 - 210
Max. Layer thickness		in	1.6
Demold time		h	18

Cured / Mechanical Properties

Cure: 7 days at RT or 14h at 40°C			EC-2402 / EH-2902-1
Aspect	visual		Black
Density	ASTM D-792	lb/ft ³ (g/cm ³)	ca. 137 (ca. 2.2)
Shore hardness D	ASTM D-2240		85-90
Coefficient of thermal expansion	ASTM D-3386	10 ⁻⁶ F ⁻¹ (10 ⁻⁶ K ⁻¹)	28 – 33 (50-60)
Deflection temperature, HDT	ASTM D-648	°F (°C)	131-140 (55–60)
Glass Transition Temperature, Tg	DSC	°F (°C)	131-140 (55–60)
Compressive strength	ASTM D-695	Psi	14,500 – 15,200
Compressive modulus	ASTM D-695	Psi	798,000 – 870,000
Flexural strength	ASTM D-790	Psi	10,900 – 11,600
Flexural modulus	ASTM D-790	Psi	725,000 – 798,000
Linear shrinkage*	ASTM D-2566	in / in	0.0006

*measured on maximum layer thickness as stated above

Processing

The processing and material temperature should be between 68-77°F (20-25°C).

Mix the two components thoroughly in the ratio indicated.

Degassing is recommended.

Packaging

RAKU® TOOL EC-2402

6 x 4.1 lbs / 29.7 lbs (6 x 1.86 kg / 13.5 kg)

RAKU® TOOL EH-2902-1

48.5 lbs (22 kg)

Storage

Original containers should be kept tightly sealed and stored at ambient temperatures 59-86°F (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.
