

Epoxy Gelcoat System

Thixotropic, room temperature curing

Key Properties

- Reduced hazard rating
- Easy to apply and low odor
- Choice of reactivity
- White surface, can be sanded and polished
- Easy to process

Applications

- Negatives
- Models
- Jigs and fixtures
- Plaster working molds for ceramics

Processing Properties

			EG-2101	EH-2950-1
Color	visual		White	Yellowish
Mix ratio		parts by weight	100	12
Density	ASTM D-792	lb/ft ³ (g/cm ³)	ca. 91 (ca. 1.45)	ca. 63 (ca. 1.01)

			EG-2101 / EH-2950-1
Pot life at 77°F (25°C)	250 ml	min	50-60
Demold time		h	16

Cured / Mechanical Properties

Cure: 16h at RT + 14h at 176°F (80°C)			EG-2101 / EH-2950-1
Aspect	visual		White
Density	ASTM D-792	lb/ft ³ (g/cm ³)	ca. 87 (ca. 1.4)
Shore hardness D	ASTM D-2240		85-90
Deflection temperature, HDT	ASTM D-648	°F (°C)	190-199 (88-93)
Glass Transition Temperature, Tg	DSC	°F (°C)	190-199 (88-93)
Abrasion	Taber	mm ³ /100R	75-85

Processing

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

Mix the two components thoroughly in the ratio indicated. Apply in thin layers with a brush.

Wait until gelcoat has gelled but ensure that it is still slightly tacky before proceeding.

Degassing will improve mechanical properties.

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 176°F (80°C) in steps and post cured for 14 hours at 80°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 EG-2101	11 lbs (5 kg)
RAKU® TOOL EH-2950-1	6 x 2.2 lbs, 4.4 lbs (6 x 1 kg, 2 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.
