

Epoxy Gelcoat System

RT curing, iron filled

Key Properties

- Reduced hazard rating
- Hard but still workable surface
- Thixotropic, holds well on vertical surfaces
- Low sedimentation
- Wear resistant

Applications

- Foundry patterns
- Metal forming tools
- General wear resistant tooling aids

Processing Properties

			EG-2103	EH-2903-1
Color	visual		Black	Orange
Mix ratio		parts by weight	100	11
Density	ISO 1183	g/cm ³	ca. 2.84	ca. 1.09

			EG-2103 / EH-2903-1
Pot life at 25 °C	250 ml	min	25-30
Demold time		h	16

Cured / Mechanical Properties

Cure: 16h at RT + 14h at 80°C			EG-2103 / EH-2903-1
Appearance	visual		Black
Density	ISO 1183	g/cm ³	ca. 2.2
Hardness Shore D	ISO 868		85-90
Deflection temperature, HDT	ISO 75	°C	75-85
Glass Transition Temperature, Tg	DSC	°C	75-80
Abrasion	Taber	mm ³ /100R	50-55

Processing

The processing and material temperature should be between 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 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-2103	6.8 kg
RAKU® TOOL EH-2903-1	6 x 0.75 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.
