

EG-2103 / EH-2903-1

Epoxy Gelcoat Resin

Metal filled, room temperature curing

Key Properties

- Hard but still workable surface
- Thixotropic, holds well on vertical surfaces
- Low sedimentation
- Abrasion resistant

Applications

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

Processing Properties

		Unit	EG-2103	EH-2903-1
Color	visual		black	orange
Mix ratio		pbw	100	11
Density	ISO 1183	g/cm ³	ca. 2.84	ca. 1.09

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

Cured / Mechanical Properties

		Unit	EG-2103 / EH-2903-1
Cure			16h at RT + 14h at 80°C
Color		visual	black
Density	ISO 1183	g/cm ³	ca. 2.20
Hardness	ISO 868	Shore D	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 temperature 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 the gelcoat has gelled, but ensure that it is still slightly tacky before proceeding.

The mechanical properties and temperature resistance are only obtained through a 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.