

Epoxy Coupling Coat

Prefabricated, two component coupling coat

Key Properties

- Universally applicable coupling coat
- Very good temperature resistance
- Excellent interlayer adhesion
- Consistent thixotropy

Applications

- Production of tools, molds and tooling aids with various systems like Epoxy and Polyurea Systems
- Coupling layer between gelcoat and backing structure (e.g. casting, laminating, tamping)

Processing Properties

			EL-2209-1	EH-2950-1
Color	visual		Gray	Yellowish
Mix ratio		pb weight	100	10
Density	ISO 1183	g/cm ³	ca.1.8	ca.1.01
Viscosity at 25 °C	DIN 53019-1	mPa·s	100,000-200,000	200-400
			EL-2209-1 / EH-2950-1	
Mix viscosity at 25 °C	DIN 53019-1	mPa·s	80,000-160,000	
Pot life at 25 °C	500 ml	min	20-30	
Max. layer thickness		mm	-	
Demold time		h	16	

Cured / Mechanical Properties

Cure: 16h at RT + 14h at 100°C			EL-2209-1 / EH-2950-1
Appearance	visual		Gray
Density	ISO 1183	g/cm ³	ca.1.7
Deflection temperature, HDT	ISO 75	°C	100-105
Glass Transition Temperature, Tg	DSC	°C	95-100
Flexural strength	ISO 178	MPa	80-90
Flexural modulus	ISO 178	MPa	5,800-6,300

Processing

The processing and material temperature should be between 20-25 °C.

Mix the two components thoroughly in the ratio indicated. Degassing is recommended.

Apply the coupling coat with a spatula/brush in thin, even layers. 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 100°C in steps and post cured for 14 hours at 100°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® EL-2209-1	10 kg
RAKU-TOOL® EH-2950-1	2 kg / 6 x 1 kg / 25 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.
