

EL-2201 / EH-2904-1, EH-2905-1, EH-2906-1

Epoxy Laminating Resin

Unfilled with variable reactivity (fast/medium/slow)

Key Properties

- Pot life and curing time can be adjusted through choice of hardener
- High mechanical values at RT curing
- Excellent compatibility with fibers, fabrics and fillers
- With mineral and metallic fillers suitable as backing casting

Applications

- Jigs
- Foundry patterns
- Universal production of tools and tooling aids
- UP lay-up tools
- Reinforcements

Processing Properties

		Unit	EL-2201	EH-2904-1	EH-2905-1	EH-2906-1
Color	visual		colorless	yellowish	yellowish	yellowish
Mix ratio		pbw	100	50	-	-
Mix ratio		pbw	100	-	50	-
Mix ratio		pbw	100	-	-	50
Density	DIN 2811-1	g/cm³	ca. 1.17	ca. 1.00	ca. 1.01	ca. 1.01
Viscosity at 25 °C	DIN 53019-1	mPa·s	6,000 - 11,000	30 - 70	80 - 120	40 - 80

		Unit	EL-2201 / EH-2904-1	EL-2201 / EH-2905-1	EL-2201 / EH-2906-1
Mix viscosity at 25 °C	DIN 53019-1	mPa·s	900 - 1,100	700 - 800	700 - 800
Pot life at 25 °C	500 ml	min	25 - 30	60 - 70	120 - 140
Max. layer thickness		mm	8	8	8
Demold time		h	12	16	18

Cured / Mechanical Properties

		Unit	EL-2201 / EH-2904-1 7 days at RT or 14h at 40°C	EL-2201 / EH-2905-1 7 days at RT or 14h at 40°C	EL-2201 / EH-2906-1 7 days at RT or 14h at 40°C
Cure					
Color		visual	yellowish	yellowish	yellowish
Density	ISO 1183	g/cm³	ca. 1.16	ca. 1.16	ca. 1.16
Deflection temperature, HDT	ISO 75	°C	55 - 60	53 - 58	50 - 55
Glass transition temperature, Tg	DSC	°C	55 - 60	50 - 55	55 - 60
Flexural strength	ISO 178	MPa	100 - 105	100 - 105	100 - 105
Flexural modulus	ISO 178	MPa	2,800 - 3,300	3,000 - 3,500	3,000 - 3,500



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Processing

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

Degassing is recommended.

Impregnate each layer of cloths to construct the laminate layer by layer.

Post curing will improve final properties.

Packaging

RAKU® TOOL EL-2201	200 kg, 25 kg
RAKU® TOOL EH-2904-1	25 kg, 2 kg, 1 kg
RAKU® TOOL EH-2905-1	2 kg
RAKU® TOOL EH-2906-1	25 kg, 2 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.