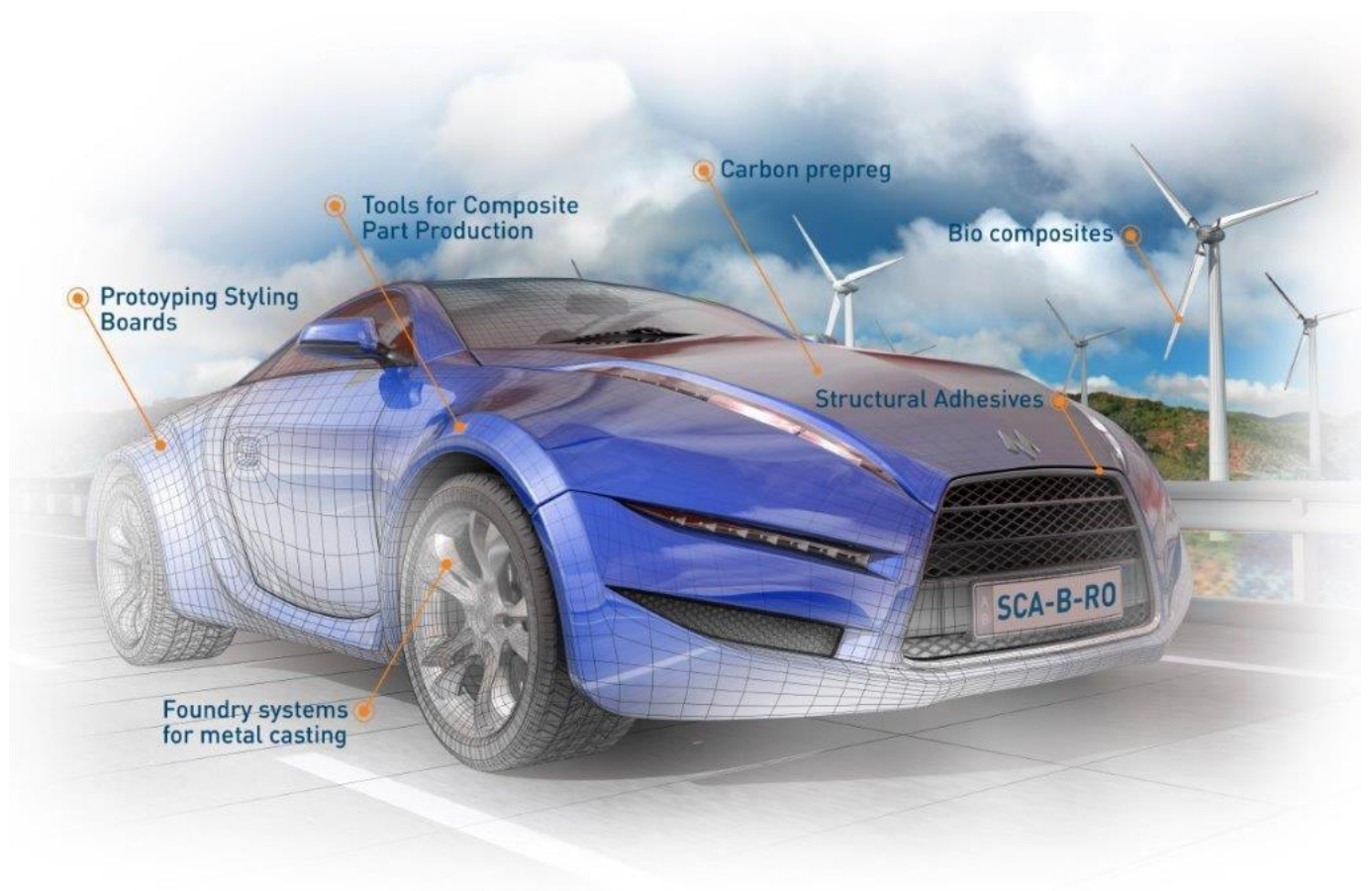


TECHNICAL DATASHEET

RAKU-TOOL EL-2204

Epoxy



MALLENBOUW | COMPOSITEN | LIJMEN

Epoxy Laminating System

Temperature resistant, unfilled Epoxy System

Key Properties

- Very high temperature resistance (170 °C)
- Excellent wetting properties even with carbon fibers

Applications

- Temperature resistant, glass or carbon fiber reinforced tools
- Prepreg lay-up tools
- Also suitable for tools with high temperature resistance with corresponding gelcoat and fillers
- Backing structures

Processing Properties

			EL-2204	EH-2950-1
Color	visual		Amber	Yellowish
Mix ratio		parts by weight	100	32
Density	ISO 1183	g/cm ³	ca.1.17	ca.1.01
Viscosity at 25 °C	DIN 53019-1	mPa·s	4000-4500	200-300

			EL-2204 EH-2950-1
Mix viscosity at 25 °C	DIN 53019-1	mPa·s	1000-1500
Pot life at 25 °C	500 ml	min	65-75
Max. layer thickness		mm	8
Demold time		h	24

Cured / Mechanical Properties

Cure: 16h at RT + 14h at 180°C			EL-2204 EH-2950-1
Appearance	visual		Amber
Density	ISO 1183	g/cm ³	ca.1.2
Deflection temperature, HDT	ISO 75	°C	160-165
Glass Transition Temperature, Tg	DSC	°C	170-180
Flexural strength	ISO 178	MPa	145-150
Flexural modulus	ISO 178	MPa	3,800-4,300

Processing

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

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

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

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 180°C in steps and post cured for 14 hours at 180°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-2204	5 kg / 25 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.