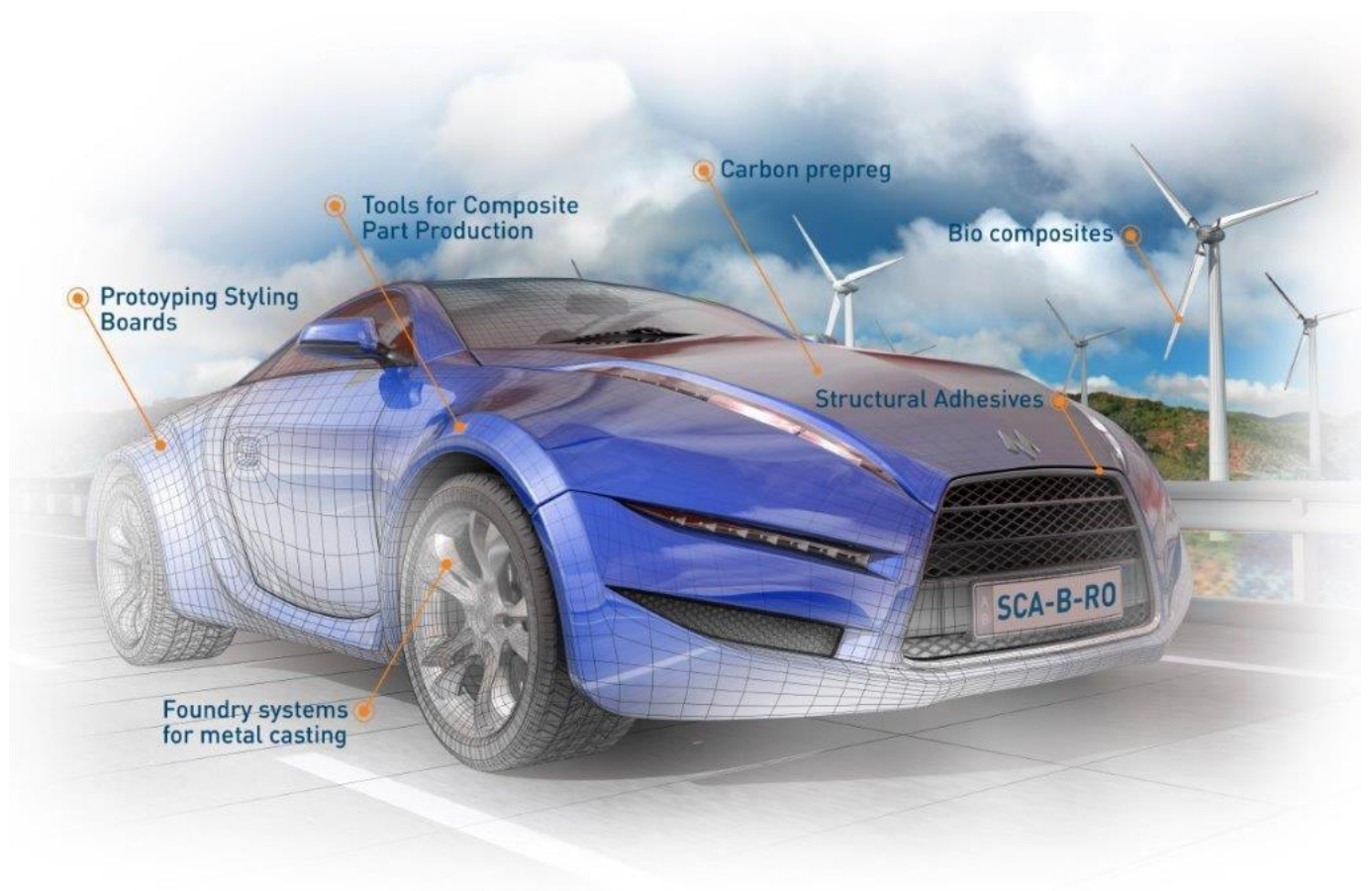


TECHNICAL DATASHEET

RAKU-TOOL EL-2201

Epoxy



MALLENBOUW | COMPOSITEN | LIJMEN

Epoxy Laminating System

High temperature resistant, unfilled epoxy

Key Properties

- Long pot life
- Good wetting properties
- Temperature resistant up to 130°C by post curing

Applications

- High temperature molds
- Prepreg lay-up tools
- Wet compression molding

Processing Properties

			EL-2201	EH-2971
Color	visual		Clear	Clear
Mix ratio		parts by weight	100	26
Density	ISO 1183	g/cm ³	ca.1.17	ca.0.87
Viscosity at 25 °C	DIN 53019-1	mPa·s	7,000-9,000	15-25

			EL-2201 / EH-2971
Mix viscosity at 25 °C	DIN 53019-1	mPa·s	1,000-2,000
Pot life at 25 °C	500 ml	min	100-120
Max. layer thickness		mm	8
Demold time		h	24

Cured / Mechanical Properties

Cure: 8h at 60°C + 14h at 120°C			EL-2201 / EH-2971
Appearance	visual		Clear
Density	ISO 1183	g/cm ³	ca.1.13
Deflection temperature, HDT	ISO 75	°C	128-133
Glass Transition Temperature, Tg	DSC	°C	135-140
Flexural strength	ISO 178	MPa	120-125
Flexural modulus	ISO 178	MPa	2,800-3,300

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 are still brittle and require a pre-post cure for 8 hours at 60 °C before demolding. Afterwards, the parts must be heated up to 120 °C in steps and post cured for 14 hours at 120 °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-2201	25 kg / 200 kg
RAKU-TOOL® EH-2971	3 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.