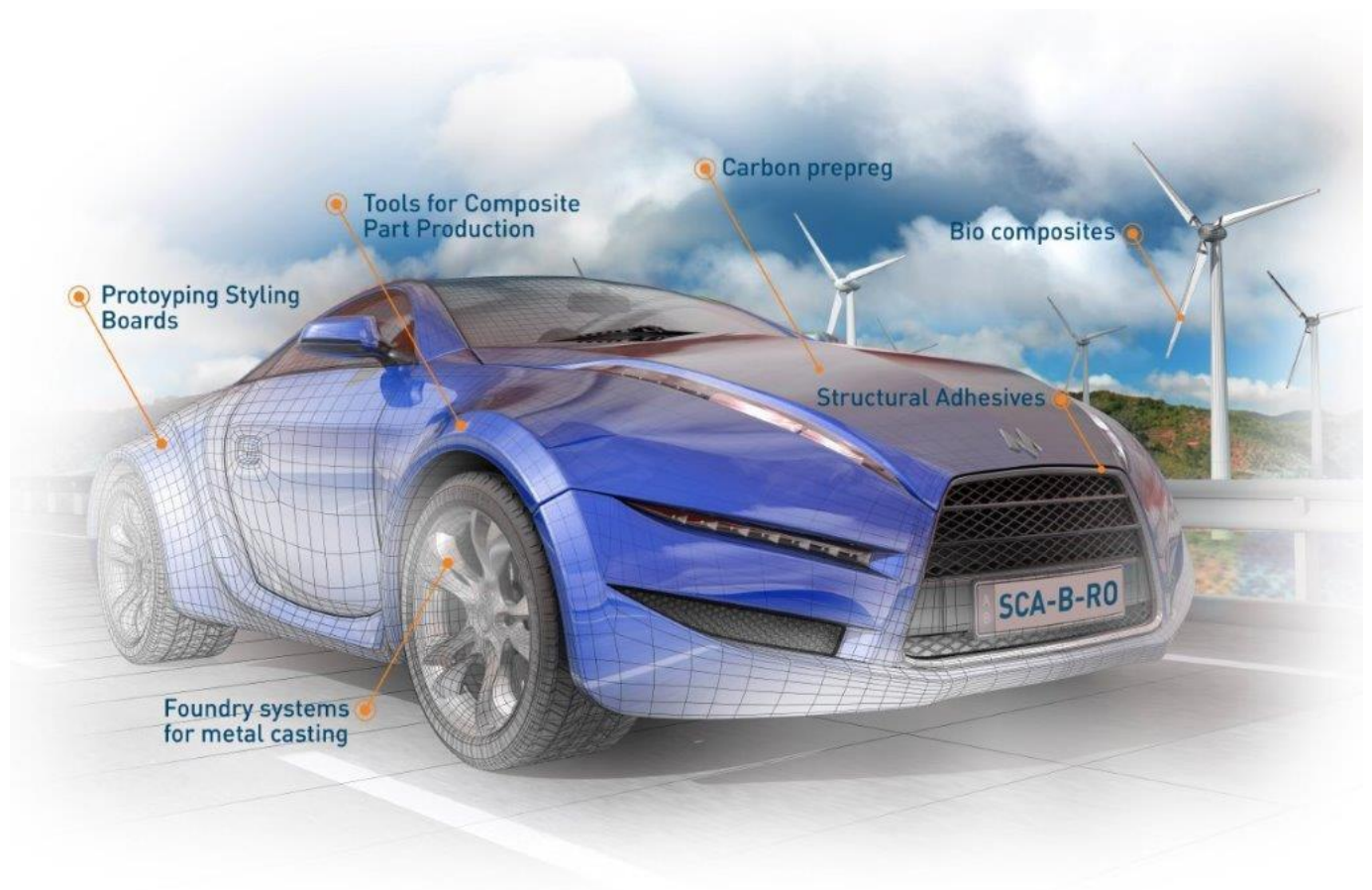


TECHNICAL DATASHEET

RAKU-TOOL EC-2400

Epoxy



MALLENBOUW | COMPOSITEN | LIJMEN

Epoxy Casting System

Abrasion resistant

Key Properties

- Easy to pour
- Low sedimentation
- Good resistance to chemicals
- Reactivity can be adjusted
- Hard surface, abrasion resistant
- Good mechanical properties

Applications

- Foundry patterns
- Copy models
- Foam molds (face casting)

Processing Properties

			EC-2400	EH-2909	EH-2952-1
Color	visual		Blue	Clear	Clear
Mix ratio		parts by weight	100	6	
			100		7
Density	ISO 1183	g/cm ³	ca. 2.0	ca. 0.87	ca. 0.96
Viscosity at 25 °C	DIN 53019-1	mPa·s	100000-200000	30-40	20-50

			EC-2400 / EH-2909	EC-2400 / EH-2952-1
Mix viscosity at 25 °C	DIN 53019-1	mPa·s	7500-8500	12000-18000
Pot life at 25 °C	1000 ml	Min	45	150-180
Max. layer thickness		mm	30	60
Demold time		h	12	18

Cured / Mechanical Properties

Cure:

			7 days at RT or 14h at 40°C	16h at RT + 14h at 120°C
			EC-2400 / EH-2909	EC-2400 / EH-2952-1
Appearance	visual		Blue	Blue
Density	ISO 1183	g/cm ³	ca. 1.9	ca. 1.9
Shore hardness D	ISO 868		85-90	85-90
Coefficient of thermal expansion	ISO 11359	10 ⁻⁶ K ⁻¹	30-40	30-40
Deflection temperature, HDT	ISO 75	°C	65-70	115-120
Glass Transition Temperature, Tg	DSC	°C	63-68	115-120
Compressive strength	ISO 604	MPa	135-140	165-170
Compressive modulus	ISO 604	MPa	8300-8800	9500-10000
Flexural strength	ISO 178	MPa	93-98	115-120
Flexural modulus	ISO 178	MPa	8500-900	9000-9500
Linear shrinkage*		mm / m	0.1	0.1

*measured on maximum layer thickness as stated above

Processing

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

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

EC-2400 / EH-2952-1: The mechanical properties and temperature resistance are only obtained through the post cure according to the recommended cure schedule.

Recommended cure schedule (EC-2400 / EH-2952-1)

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 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® EC-2400	5 kg
RAKU-TOOL® EH-2909	6x 0.900 kg
RAKU-TOOL® EH-2952-1	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.