

Epoxy Infusion System

Flame Retardant Infusion System

Key Properties

- Excellent wetting properties
- Very good flow
- Minimum working time at RT 1.5 hours
- Temperature resistant up to 212°F (100°C)
- Flame retardant

Applications

- Resin Infusion

Processing Properties

			EI-2507	EH-2974
Mix ratio		pbw	100	18
		pbv	100	21.5
Density	ASTM D-792	g/cm ³	ca. 1.14	ca. 0.95
Viscosity at 77°F (25°C)	ASTM D-2393	cP	800-1300	10-20

			EI-2507 / EH-2974
Mix viscosity at 77°F (25°C)	ASTM D-2393	cP	300-600
Pot life at 77°F (25°C)	100 ml	min	90-120
Demold time at 77°F (25°C)		hours	24

Cured / Mechanical Properties

Cure: 8h at 77°F (25°C) + 16h at 302°F (150°C)			EI-2507 / EH-2974
Aspect	visual		White to Yellow
Density	ASTM D-792	g/cm ³	ca. 1.1
Shore hardness D	ASTM D-2240		70-80
Glass Transition Temperature, T _g	ASTM D-3418	°F (°C)	212-220 (100-105)
Tensile strength	ASTM D-638	psi (MPa)	5,000-6,000 (35-40)
Elongation at Break	ASTM D-638	%	1-2
Flexural strength	ASTM D-790	psi (MPa)	21,000-22,500 (145-155)
Flexural modulus	ASTM D-790	psi (MPa)	600,000-680,000 (4,150-4,800)

Processing

The processing and material temperature should be between 68-77°F (20-25°C).

For best results, de-air the material prior to casting. Mix the two components thoroughly in the ratio indicated. 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 8 hours depending on the size and thickness of the parts, the parts must be heated up to 150°C in steps and post cured for 16 hours at 150°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 EI-2507	15 kg
RAKU® TOOL EH-2974	3 kg

Storage

Original containers should be kept tightly sealed and stored at ambient temperatures 59-86°F (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.
