RAKU® TOOL EI-2511 / EH-2990



Epoxy Infusion System

Infusion System for High Wet Tg

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PK - Rev.-Status: 02- 2022/06/01

Page 1 of 2

Key Properties

- Very good flow
- Gel time at 60°C is 130 minutes
- Temperature resistant up to 155°C
- Flame Retardant properties

Applications

- Aircraft composites
- Meets interior, cargo, and firewall requirements

Processing Properties

			El-2511 Resin	EH-2990 Hardener
Mix ratio pbw pbv		pbw	100	50
	pbv	100	64	
Density	ASTM D-792	g/cm ³	ca. 1.2	ca. 0.94
Viscosity at 77°F (25°C)	ASTM D-2393	сР	3800-5500	200-250

			Resin / Hardener
Mix viscosity at 104°F (40°C)	ASTM D-2393	сР	250-550
Pot life at 140°F (60°C)	150 ml	min	110-150
Demold time at 104°F (40°C)		hours	TBD by customer depending on shape

Cured / Mechanical Properties

Cure: 40°C to 120°C hold 1 hour + 2 hours at 180°C			Resin / Hardener
Aspect	visual		Cream
Density	ASTM D-792	g/cm ³	ca. 1.2
Shore hardness D	ASTM D-2240		85
Glass Transition Temperature, Tg	DMA	°F (°C)	311(155)
Tensile strength	ASTM D-638-14	psi (MPa)	6000 (42)
Elongation at Break	ASTM D-638-14	%	5-6

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Processing

The processing and material temperature should be approximately 104°F (40°C).

For best results, apply vacuum to 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

Cure at 30°C to 120°C by ramping the temperature by 1°C per minute; then hold for 1 hour depending on the size and thickness of the parts. Subsequently, post cure at 180 °C for 2 hours. Next cool down gradually by 2°C per minute. The curing time, heating, and cooling rate depend on the size and thickness of the parts.

Packaging

DAKLIR TOOL ELOE11 Degin	10 kg
RAKU®-TOOL EI-2511 Resin	10 kg
RAKU®-TOOL EH-2990 Hardener	1 kg
RANUS-100L En-2990 hardener	1 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.

RAMPF Group, Inc. 49037 Wixom Tech Drive Wixom, MI 48393-2066 T +1 248. 295.0223 F +1 248. 295.0224 E info@rampf-group.com www.rampf-gruppe.de Our recommendations on the use of the material are based on many years of experience and current scientific and practical knowledge. They are, however, provided without any obligation on our part and do not relieve the buyer of the need for suitability tests. They do not constitute a legal relationship, nor are any protected third party rights whatsoever affected thereby.