## **RAKU® TOOL EI-2511 / EH-2990**



# **Epoxy Infusion System**

### Infusion System for High Wet Tg

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### **Key Properties**

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

#### **Applications**

• Resin Infusion for Water Tanks

#### **Processing Properties**

			El-2511 Resin	EH-2990 Hardener
Miss ratio		pbw	100	50
Mix ratio		pbv	100	64
Density	ASTM D-792	g/cm <sup>3</sup>	ca. 1.2	ca. 0.94
Viscosity at 77°F (25°C)	ASTM D-2393	сР	1600-2000	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 h	1 hour + 2 hours at 180°C Resin / Hardener  visual Cream		
Aspect	visual		Cream
Density	ASTM D-792	g/cm <sup>3</sup>	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)	TBD
Elongation at Break	ASTM D-638-14	%	TBD
Fracture Toughness	ASTM D-5045-14	MPa.m <sup>1/2</sup>	TBD

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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 EL 2511 Dagin	TBD		
RAKU®-TOOL EI-2511 Resin	IBD		
RAKU®-TOOL EH-2990 Hardener	TBD		
RANU°-100L En-2990 haldellei	עסו		

#### 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.