RAKU[®] TOOL VA-1810



80A / Excellent Green Strength / 10 Min. Gel

80 shore A polyurethane elastomer

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PC - Rev.-Status: 01- 2016/07/01

Page 1 of 2

Key Properties

- Excellent physical properties after RT cure
- Free of mercury, MOCA or TDI
- Excellent green strength for quick demold times

Applications

For hand-batch processing, vacuum assisted processing or meter mix dispensed

Processing Properties

			Resin (Isocyanate)	Hardener (Polyol)
Mix ratio		pbw	80	100
		pbv	72	100
Density	ASTM D-792	g/cm ³	ca. 1.21	ca. 1.14
Viscosity at 77°F (25°C)	ASTM D-2393	cP	ca. 4,500	ca. 550

			Mixture
Mix viscosity at 77°F (25°C)	ASTM D-2393	cР	ca. 1,750
Gel time at 77°F (25°C)		min	8-12
Demold time at 77°F (25°C)		min	60-120

Cured / Mechanical Properties (approximate values)

Cure 1: 24 hours at 77°F + 1 hour at 150°F Cure 2: 7 days at 77°F			Cure 1	Cure 2
Aspect	visual		Off-white	Off-white
Density	ASTM D-792	g/cm ³	1.12	1.12
Shore hardness A	ASTM D-2240		70-80	70-80
Tensile strength	ASTM D-638	psi	900	650
Elongation at Break	ASTM D-638	%	100	90
Tear strength	ASTM D-624	pli	80	60
Linear shrinkage	ASTM D-2566	in/in	0.002-0.005	0.002-0.005

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PC - Rev.-Status: 01- 2016/07/01 Page 2 of 2

Processing

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

For best results, place the poured tool into a pressure vessel and pressurize to 60 psi until cured. This material will slightly darken as it ages. It is not recommended that custom color-matching be incorporated into this system due to this slight color change that transpires.

Agitate Hardener and Resin before mixing to ensure a homogenous formulation.

Packaging	-	
VA-1810 Quart Kit	3.6 lbs.	
VA-1810 1 Gal. Kit	14.4 lbs.	
VA-1810 5 Gal. Kit	72 lbs.	
VA-1810 Drum Kit	810 lbs.	

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 T +1 248. 295.0223 F +1 248. 295.0224 E info.us@rampf-group.com 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.