# RAKU<sup>®</sup> TOOL VA-1815



# 80A / Black / Excellent Green Strength

## 80 shore A polyurethane elastomer

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#### **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 <sup>3</sup>	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 1 Cure 2: 7 days at 77°F	Cure 1	Cure 2		
Aspect	visual		Black	Black
Density	ASTM D-792 g/c		1.12	1.12
Shore hardness A	ASTM D-2240		70-80	70-80
Tensile strength ASTM I		psi	900	650
Elongation at Break ASTM D		%	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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#### **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. Black pigment has been added to the hardener and will settle out of solution.

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

#### **Packaging**

VA-1815 Quart Kit	3.6 lbs.
VA-1815 1 Gal. Kit	14.4 lbs.
VA-1815 5 Gal. Kit	72 lbs.
VA-1815 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.