RAKU[®] TOOL InnoClear[™] OC-5080



80A Water Clear

Water clear, semi-flexible polyurethane elastomer

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Key Properties

- Excellent physical properties after RT cure
- Free of mercury, MOCA or TDI
- Low viscosity and uses materials that have excellent U.V. resistant qualities

Applications

• For hand-batch or vacuum assisted processing

Processing Properties

			Resin (Isocyanate)	Hardener (Polyol)
Mix ratio		pbw	35	100
		pbv	35	100
Density	ASTM D-792	g/cm ³	ca. 1.07	ca. 1.07
Viscosity at 77°F (25°C)	ASTM D-2393	cP	ca. 200	ca. 850

			Mixture
Mix viscosity at 77°F (25°C)	ASTM D-2393	cР	ca. 750
Gel time at 77°F (25°C)		min	12-18
Demold time at 77°F (25°C)		h	3-5

Cured / Mechanical Properties (approximate values)

Cure 1: 24 hours at 77°F + 16 hours at 150°F Cure 2: 7 days at 77°F			Cure 1	Cure 2
Aspect	visual		Clear	Clear
Density	ASTM D-792	g/cm ³	1.07	1.07
Shore hardness A	ASTM D-2240		72-82	72-82
Tensile strength	ASTM D-638	psi	865	550
Elongation at Break	ASTM D-638	%	95	85
Tear strength	ASTM D-624	pli	60	50
Linear shrinkage	ASTM D-2566	in/in	0.001-0.005	0.001-0.005

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Processing

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

Certain silicone rubbers, including platinum silicones, will inhibit the OC-5000 series. Tin based silicones will yield the most favorable results. It is recommended that a test plaque be cast on the outside of the silicone tool to test for compatibility. Contact your RAMPF Group Inc. representative for more information. For best results, de-air the material prior to casting, then pressurize to 60 psi until cured. If pigment has been added to the hardener component, it will separate during storage.

Agitate hardener before mixing to ensure that the formula is homogeneous.

Packaging		
OC-5080 Quart Kit	2.7 lbs.	
OC-5080 1 Gal. Kit	10.8 lbs.	
OC-5080 5 Gal. Kit	54 lbs.	
OC-5080 Drum Kit	607.5 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.