RAKU[®] TOOL InnoTooling[™] IE-3645



IE-3644 w / 90 Second Gel

Tough, abrasion resistant urethane

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Key Properties

- Excellent physical properties after RT cure
- Free of mercury, MOCA or TDI

Applications

• For room temperature meter-mix dispensing

Processing Properties

			Resin (Isocyanate)	Hardener (Polyol)
Mix ratio		pbw	100	51
		pbv	100	50
Density	ASTM D-792	g/cm ³	ca. 1.14	ca. 1.18
Viscosity at 77°F (25°C)	ASTM D-2393	cР	ca. 5,800	ca. 80

			Mixture
Mix viscosity at 77°F (25°C)	ASTM D-2393	cР	ca. 2,750
Gel time at 77°F (25°C)		min	1:15-1:45
Demold time at 77°F (25°C)		min	10-20

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		Translucent Amber	Translucent Amber
Density	ASTM D-792	g/cm ³	1.14	1.14
Shore hardness D	ASTM D-2240		50-60	50-60
Tensile strength	ASTM D-638	psi	2,800	3,000
Elongation at Break	ASTM D-638	%	20	100
Tear strength	ASTM D-624	pli	350	370
Flexural modulus	ASTM D-790	psi	38,000	45,000
Notched Izod	ASTM D-256	ft-lbf/in	6.0	9.0
Linear shrinkage	ASTM D-2566	in/in	.001	.001

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Processing

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

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

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IE-3645 Quart Kit	3.02 lbs.
IE-3645 1 Gal. Kit	12.08 lbs.
IE-3645 5 Gal. Kit	60.4 lbs.
IE-3645 Drum Kit	679.5 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.