


Innothane®

Product Name **InnoTuf® TP-4016**
Flame Retardant/High Heat Resistance

Description TP-4016 is an impact resistant polyurethane formulated for room temperature meter-mix dispensing systems. Excellent physical properties can be obtained without the utilization of mercury, MOCA, or TDI. TP 4016 is a U.L. 94v1 registered flame retardant polyurethane.

Physical Properties

Mix Ratio	Resin:Hardener (parts by weight)		100:52	
Mix Ratio	Resin:Hardener (parts by volume)		100:50	
Viscosity (cps@100°F)	Resin	700	Gel Time	6 ± 1 Minute
	Hardener	200	Demold Time*	3 ± 1 Hour
	Mixed	350	Color	Black
Specific Gravity (g/cc)	Resin	1.22	*Demold time is always mass dependant	
	Hardener	1.28		

Cured Properties

Cure 1 ► 1 hours at 150°F + 24 hours at 77°F
 Cure 2 ► 7 days at 77°F



	Method	Cure 1	Cure 2
Hardness (shore D)	ASTM D-2240	70 ± 5	70 ± 5
Tensile Strength (psi)	ASTM D-638	6,800	4,900
Elongation at Break	ASTM D-638	20%	18%
Ultimate Flex Strength (psi)	ASTM D-790	6,500	7,700
Flexural Modulus (psi)	ASTM D-790	150,000	168,300
Tensile Modulus (psi)	ASTM D-638	100,000	105,400
Notched Izod (ft.lbs./in.)	ASTM D-256	2.5	2.5
Linear Shrink (in./in.)	ASTM D-2566	.001-.005	.001-.005
Heat Deflection Temp. (264psi)	ASTM D-648	121°C / 250°F	110°C / 230°F
Specific Gravity (g/cc)		1.25	1.25

Processing Notes

TP-4016 has been formulated for meter-mix dispensing equipment. It is recommended that dry nitrogen be used to protect the material from oxidizing and being moisture contaminated.

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

<u>Kit Weights</u>	Quart Kits	1 Gal. Kit	5 Gal. Kit	Drum Kit
	3.04 lbs.	12.16 lbs.	60.8 lbs.	684 lbs.

Safety and Handling

DO NOT USE UNTIL MSDSs HAVE BEEN READ AND UNDERSTOOD. Store containers in a dry location. Partially used containers should be blanketed with dry nitrogen to prevent moisture contamination. Moisture will react with the resin component, creating carbon dioxide gas and a possible pressure increase in the container.
SPECIFICATION WRITERS: The above values are meant to represent typical properties only. Users are encouraged to qualify products in their own laboratories prior to specification publication.
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