



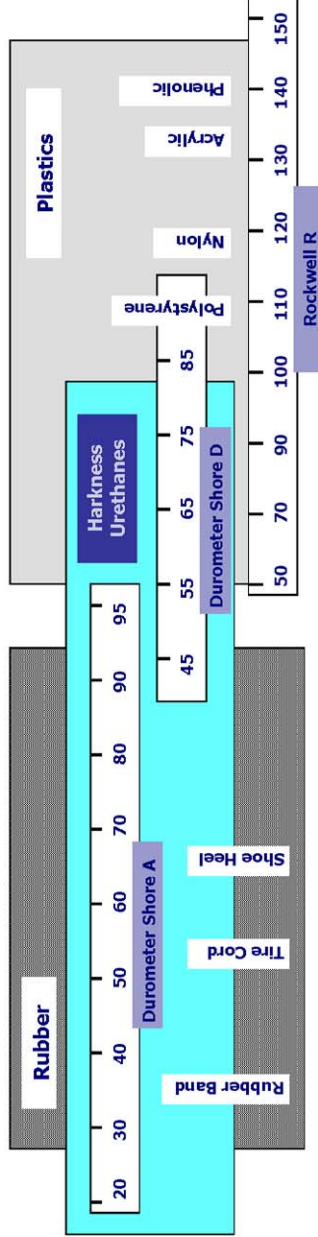
**NATIONWIDE PLASTICS, INC.**

*The Authority on Plastics Manufacturing and Distribution*



# Urethane Product Selector Guide

## Typical Applications



APPLICATIONS	REPLACES	MP 300	MP 600	MP 750	MP 850	MP 900	MP 950	MP 160	MP 175	Key Physical Properties
Bumper Pads	Rubber		X							Hardness or Durometer, Shore A & D
Cutter Bars	UHMW, Wood									Resilience, Tear
Wear Pads	UHMW, Metal									Tear, Compression/Deflection
Gaskets	Rubber, Cork	X								Abrasion, Tear, Resilience
Drive/Idler Rollers	UHMW, Rubber		X							Compression Set, Chem. Resistance
Die Cutting Pads	UHMW, Wood									Tear, Compression/Deflection
Wiper Blades	Rubber		X							Tear, Compression/Deflection
Hydraulic Seals	Rubber									Tear, Abrasion, Solvent Resistance
Bushings	Rubber, Metal									Oil Resistance, Compression Set
Isolation Vibration	Rubber									Abrasion, Tear
Tires & Wheels	Rubber									Resilience, Compression/Deflection
Material Handling	UHMW, Metal		X							Heat build-up, Compression Set

Can't find your end use ... Urethanes are used in hundreds of applications. Call our Design Engineers for an expert recommendation.



50 Grandview Court, Cheshire, CT. 06410  
 Tel: 203-272-3219 Fax: 203-272-0428  
 Website: www.harknessindustries.com

**Call us TOLL-FREE 800-343-4275**

Dallas, Texas (Corporate Offices)  
 Houston, Texas  
 Brandon, Mississippi  
[www.nationwideplastics.net](http://www.nationwideplastics.net)

phone 800-782-1836 / 214-239-3870  
 phone 800-282-4388 / 713-979-0660  
 phone 800-457-8623 / 601-825-7919

fax 214-239-3871  
 fax 713-979-0664  
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January 1, 2007 - Version 3.0



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### Material Properties

MECHANICAL PROPERTY	ASTM Test	MP 300	MP 600	MP 750	MP 850	MP 900	MP 950	MP 160	MP 175
<b>Durometer, Shore</b>	D-2240	30A	60A	75A	85A	90A	95A	60D	75D
<b>100% Modulus, psi</b>	D-412	80	250	350	600	1,100	1,800	3,000	5,500
<b>300% Modulus, psi</b>	D-412	170	600	1,000	1,500	2,100	4,000	6,500	-
<b>Tensile, psi</b>	D-412	380	4,500	5,500	6,000	4,500	5,500	6,500	7,500
<b>Elongation, %</b>	D-412	515	500	500	500	450	320	300	225
<b>Tear, pli Die C type</b>	D-624	90	200	250	400	400	450	700	850
<b>Compression Set, % Method B, 22 hrs. @ 70° C</b>	D-395	9	10	15	25	30	40	50	-
<b>Modulus of Elasticity, psi</b>	D-638	-	500	1,500	2,800	4,400	8,600	12,500	-
<b>Compression Properties Shape Factor 0.56</b>									
<b>Deflection, psi @ 5%</b>	D-575	15	30	70	180	310	450	1,000	2,150
<b>Deflection, psi @ 10%</b>	D-575	25	70	140	390	625	890	1,600	3,700
<b>Deflection, psi @ 15%</b>	D-575	34	110	220	560	875	1,170	2,200	4,700
<b>Deflection, psi @ 20%</b>	D-575	38	160	280	690	1,125	1,400	3,000	6,000
<b>Deflection, psi @ 25%</b>	D-575	44	220	330	800	1,350	1,600	4,000	7,250
<b>Abrasion Resistance, Tabor H18 @1000g load, mg loss/1000 cycles</b>	C-501	-	30	40	40	30	40	80	450
<b>Specific Gravity</b>	D-792	1.26	1.26	1.26	1.26	1.10	1.15	1.20	1.20
<b>Polymer Base</b>		Ester	Ester	Ester	Ester	Ether	Ether	Ether	Ether

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