

## DUPONT™ TYVEK® FOR MEDICAL AND PHARMACEUTICAL PACKAGING MISCELLANEOUS PROPERTIES (ENGLISH)

**Table I. Miscellaneous properties of DuPont™ Tyvek® (English units)**

Property	Comparable Test Method	Units	Typical Values			
			Tyvek® 1073B	Tyvek® Asuron™	Tyvek® 1059B	Tyvek® 2FS™
Microbial Barrier	ASTM F1608	Log Reduction Value (LRV)	5.2	4.7	4.7	3.2
Bendtsen Air Permeability	ISO 5636-3	mL/min	572	520	671	600
Moisture Vapor Transmission Rate	TAPPI T523 <sup>1</sup>	g/m <sup>2</sup> /24 hr	1615	>1500	1640	>1500
Hydrostatic Head	AATCC TM 127 EN 20811 <sup>2</sup>	in. H <sub>2</sub> O	58	59	57	59
Tensile Strength, MD	ASTM D5035 <sup>3</sup> EN ISO 1924-2 <sup>3</sup>	lbf/in.	44	40	38	35
Tensile Strength, CD	ASTM D5035 <sup>3</sup> EN ISO 1924-2 <sup>3</sup>	lbf/in.	45	42	38	36
Elongation, MD	ASTM D5035 <sup>3</sup> EN ISO 1924-2 <sup>3</sup>	%	20	18	19	18
Elongation, CD	ASTM D5035 <sup>3</sup> EN ISO 1924-2 <sup>3</sup>	%	24	21	23	21
Elmendorf Tear, MD	ASTM D1424 EN 21974	lbf	0.7	0.8	0.6	0.6
Elmendorf Tear, CD	ASTM D1424 EN 21974	lbf	0.8	1.0	0.7	0.8
Mullen Burst	ASTM D774 ISO 2758	psi	176	149	153	131
Spencer Puncture	ASTM D3420 <sup>4</sup>	in.-lbf/in. <sup>2</sup>	50	41	39	28
Opacity	TAPPI T425 ISO 2471 <sup>5</sup>	%	91	96	89	94
Thickness (Individual)	ASTM D1777 <sup>6</sup> EN 20534 <sup>7</sup> EN ISO 534	mils	7.0	7.1	6.2	6.1

Notes: Miscellaneous properties represent typical values based on roll averages, except for thickness (individual), with samples taken uniformly across the sheet. Thickness (individual) typical values are based on a population of pooled individual data points from multiple rolls. Miscellaneous properties are not controlled in the process, and therefore, are subject to slight changes from "normal" process drift. Customers must conduct their own tests to ensure suitability for the intended application. These properties are representative for uncoated Tyvek® as sold by DuPont. Any downstream operations, such as coatings applied by sterile packaging manufacturers (SPMs), may change these values.

MD = machine direction; CD = cross direction.

1. Test conditions: 23°C, 85% RH.
2. Rate of use: 60 cm H<sub>2</sub>O/min.
3. Modified for speed and gauge length.
4. Modified for 9/16-in. (14.28-mm) probe.
5. Modified for different backing standards, area and illumination.
6. 7.15 psi, 0.625-in. diameter presser foot.
7. Surface 2 cm<sup>2</sup>, pressure 14.5 psi (100 kPa).

For more information about DuPont™ Tyvek® for medical and pharmaceutical packaging and to find out how we can help you with packaging and regulatory compliance, call us today at 1.800.44.TYVEK or visit us at [www.MedicalPackaging.DuPont.com](http://www.MedicalPackaging.DuPont.com).



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