

# Miscellaneous Properties of Legacy Tyvek® 1073B and 1059B — English

Property	Comparable Standard Test Method	Units	Typical Values	
			Legacy Tyvek® 1073B	Legacy Tyvek® 1059B
Microbial Barrier	ASTM F1608	LRV	>5	>4
	ASTM F2638	% pMax	<0.3	<0.5
Bendtsen Air Permeability	ISO 5636-3	mL/min	572	671
Moisture Vapor Transmission Rate	TAPPI T523 <sup>1</sup>	g/m <sup>2</sup> /24 hr	1615	1640
Hydrostatic Head	AATCC TM 127	in. H <sub>2</sub> O	58	57
	EN 20811 <sup>2</sup>			
Tensile Strength, MD	ASTM D5035 <sup>3</sup>	lb <sub>f</sub>	44	38
	EN ISO 1924-2 <sup>3</sup>			
Tensile Strength, CD	ASTM D5035 <sup>3</sup>	lb <sub>f</sub>	45	38
	EN ISO 1924-2 <sup>3</sup>			
Elongation, MD	ASTM D5035 <sup>3</sup>	%	20	19
	EN ISO 1924-2 <sup>3</sup>			
Elongation, CD	ASTM D5035 <sup>3</sup>	%	24	23
	EN ISO 1924-2 <sup>3</sup>			
Elmendorf Tear, MD	ASTM D1424	lb <sub>f</sub>	0.7	0.6
	EN 21974			
Elmendorf Tear, CD	ASTM D1424	lb <sub>f</sub>	0.8	0.7
	EN 21974			
Mullen Burst	ASTM D774 ISO 2758	psi	176	153
Spencer Puncture	ASTM D3420 <sup>4</sup>	in.-lb <sub>f</sub> /in. <sup>2</sup>	50	39
Opacity	TAPPI T425	%	91	89
	ISO 2471 <sup>5</sup>			
Thickness (Individual)	ASTM D1777 <sup>6</sup>	mils	7.0	6.2
	EN 20534 <sup>7</sup>			
	EN ISO 534			

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 Legacy 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; LRV = log reduction value

1. Test conditions: 73°F (23°C), 85% RH.
2. Rate of use: 60 cm H<sub>2</sub>O/min.
3. Modified for speed, sample width (1 in) 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 (50 kPa).

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# Miscellaneous Properties of Legacy Tyvek® 1073B and 1059B – Metric

Property	Comparable Standard Test Method	Units	Typical Values	
			Legacy Tyvek® 1073B	Legacy Tyvek® 1059B
Microbial Barrier	ASTM F1608	LRV	>5	>4
	ASTM F2638	% pMax	<0.3	<0.5
Bendtsen Air Permeability	ISO 5636-3	mL/min	572	671
Moisture Vapor Transmission Rate	TAPPI T523 <sup>1</sup>	g/m <sup>2</sup> /24 hr	1615	1640
Hydrostatic Head	AATCC TM 127	cm H <sub>2</sub> O	147	145
	EN 20811 <sup>2</sup>			
Tensile Strength, MD	ASTM D5035 <sup>3</sup>	N	196	169
	EN ISO 1924-2 <sup>3</sup>			
Tensile Strength, CD	ASTM D5035 <sup>3</sup>	N	200	169
	EN ISO 1924-2 <sup>3</sup>			
Elongation, MD	ASTM D5035 <sup>3</sup>	%	20	19
	EN ISO 1924-2 <sup>3</sup>			
Elongation, CD	ASTM D5035 <sup>3</sup>	%	24	23
	EN ISO 1924-2 <sup>3</sup>			
Elmendorf Tear, MD	ASTM D1424	N	3.3	2.8
	EN 21974			
Elmendorf Tear, CD	ASTM D1424	N	3.5	3.0
	EN 21974			
Mullen Burst	ASTM D774 ISO 2758	kPa	1213	1055
Spencer Puncture	ASTM D3420 <sup>4</sup>	J/m <sup>2</sup>	8756	6830
Opacity	TAPPI T425	%	91	89
	ISO 2471 <sup>5</sup>			
Thickness (Individual)	ASTM D1777 <sup>6</sup>	µm	178	157
	EN 20534 <sup>7</sup>			
	EN ISO 534			

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MD = machine direction; CD = cross direction; LRV = log reduction value

1. Test conditions: 73°F (23°C), 85% RH.
2. Rate of use: 60 cm H<sub>2</sub>O/min.
3. Modified for speed, sample width (2.54 cm) and gauge length.
4. Modified for <sup>9</sup>/<sub>16</sub>-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 (50 kPa).

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