

Miscellaneous Properties of Tyvek® 2FS™—English

Property	Comparable Standard Test Method	Units	Typical Value Tyvek® 2FS™
Microbial Barrier	ASTM F1608	LRV	3.2
Bendtsen Air Permeability	ISO 5636-3	mL/min	600
Moisture Vapor Transmission Rate	TAPPI T523 ¹	g/m ² /24 hr	>1500
Hydrostatic Head	AATCC TM 127 ²	in. H ₂ O	59
Tensile Strength, MD	EN ISO 1924-2 ³	lb _f	35
Tensile Strength, CD	EN ISO 1924-2 ³	lb _f	36
Elongation, MD	EN ISO 1924-2 ³	%	18
Elongation, CD	EN ISO 1924-2 ³	%	21
Elmendorf Tear, MD	ASTM D1424	lb _f	0.6
Elmendorf Tear, CD	ASTM D1424	lb _f	0.8
Mullen Burst	ISO 2758	psi	131
Spencer Puncture	ASTM D3420 ⁴	in.-lb _f /in. ²	28
Opacity	ISO 2471 ⁵	%	94
Thickness (Individual)	EN ISO 534 ⁶	mils	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 Tyvek® 2FS™ as sold by DuPont. Any downstream operations, such as coatings applied by sterile packaging manufacturers (SPMs), may change these values. For Tyvek® 2FS™, the [aligned test methods](#) are applied with the exception of basis weight, where the dimensions of the sample are maintained for historical reasons according to EN ISO 536.

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 H₂O/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. Surface 2 cm², pressure 14.5 psi (50 kPa).

This information is based upon technical data that DuPont believes to be reliable. It is subject to revision as additional knowledge and experience are gained. DuPont makes no guarantee of results and assumes no obligation or liability in connection with this information. It is intended for use by persons having technical skill for evaluation under their specific end-use conditions at their own discretion and risk. Since conditions of use are outside our control, DUPONT MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATIONS, NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE AND ASSUMES NO LIABILITY IN CONNECTION WITH ANY USE OF THIS INFORMATION.

This information is not intended as a license to operate under or a recommendation to infringe any patent or technical information of DuPont or others covering any material or its use.

Copyright © 2017 DuPont. All rights reserved. The DuPont Oval Logo, DuPont®, Tyvek® and Tyvek® 2FS™ are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates. (06/17)

Miscellaneous Properties of Tyvek® 2FS™ —Metric

Property	Comparable Standard Test Method	Units	Typical Value Tyvek® 2FS™
Microbial Barrier	ASTM F1608	LRV	3.2
Bendtsen Air Permeability	ISO 5636-3	mL/min	600
Moisture Vapor Transmission Rate	TAPPI T523 ¹	g/m ² /24 hr	>1500
Hydrostatic Head	AATCC TM 127 ²	cm H ₂ O	150
Tensile Strength, MD	EN ISO 1924-2 ³	N	156
Tensile Strength, CD	EN ISO 1924-2 ³	N	160
Elongation, MD	EN ISO 1924-2 ³	%	18
Elongation, CD	EN ISO 1924-2 ³	%	21
Elmendorf Tear, MD	ASTM D1424	N	2.7
Elmendorf Tear, CD	ASTM D1424	N	3.5
Mullen Burst	ISO 2758	kPa	900
Spencer Puncture	ASTM D3420 ⁴	J/m ²	4903
Opacity	ISO 2471 ⁵	%	94
Thickness (Individual)	EN ISO 534 ⁶	µm	155

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 Tyvek® 2FS™ as sold by DuPont. Any downstream operations, such as coatings applied by sterile packaging manufacturers (SPMs), may change these values. For Tyvek® 2FS™, the [aligned test methods](#) are applied with the exception of basis weight, where the dimensions of the sample are maintained for historical reasons according to EN ISO 536.

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 H₂O/min.
3. Modified for speed, sample width (2.54 cm) and gauge length.
4. Modified for 9/16-in. (14.28-mm) probe.
5. Modified for different backing standards, area and illumination.
6. Surface 2 cm², pressure 14.5 psi (50 kPa).

This information is based upon technical data that DuPont believes to be reliable. It is subject to revision as additional knowledge and experience are gained. DuPont makes no guarantee of results and assumes no obligation or liability in connection with this information. It is intended for use by persons having technical skill for evaluation under their specific end-use conditions at their own discretion and risk. Since conditions of use are outside our control, DUPONT MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATIONS, NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE AND ASSUMES NO LIABILITY IN CONNECTION WITH ANY USE OF THIS INFORMATION.

This information is not intended as a license to operate under or a recommendation to infringe any patent or technical information of DuPont or others covering any material or its use.

Copyright © 2017 DuPont. All rights reserved. The DuPont Oval Logo, DuPont®, Tyvek® and Tyvek® 2FS™ are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates. (06/17)