

DuPont™ Tyvek® 1073D

Product Properties—Metric Units

Product Features:
Antistatic Treatment
Corona Treated

Specification Properties (Metric Units)

Property	Comparable Test Method	Units	Tyvek® 1073D
Basis Weight	DIN EN ISO 536 (96) ¹	g/m ²	75.0 [72.0–78.0]
Delamination	ASTM 2724-07 ²	N	1.75 [1.35–2.15]

Notes: All specification properties are typical values based on mill roll averages, with samples taken uniformly across the sheet.

1. Modified for size: 100 cm²

2. Modified for: result interpretation – length of delamination = 116 mm, width 25.4 mm, speed = 127 mm/min and clamp distance = 60 mm

Miscellaneous Properties (Metric Units)

Property	Comparable Test Method	Units	Tyvek® 1073D
Thickness	DIN EN ISO 534 (05) ³	µm	210
Opacity	ISO 2471 (98) ⁴	%	96.5
Tensile Strength, MD	DIN EN ISO 1924-2 (08) ⁵	N	200
Tensile Strength, CD	DIN EN ISO 1924-2 (08) ⁵	N	215
Mullenburst	ISO 2758 (01)	kPa	1200
Elmendorf Tear, MD	DIN EN 21974 (94)	N	5.3
Elmendorf Tear, CD	DIN EN 21974 (94)	N	5.3

Notes: Miscellaneous properties are typical values based on mill roll averages, unless otherwise noted but are not warranted in any way, expressed or implied. Miscellaneous properties are not controlled in the process and are subject to normal process drift.

3. Modified for: backing standards, measuring area, and illumination = wide area.

4. Modified for: speed = 100 mm/min, width = 25.4 mm and gauge length = 127 mm

5. Surface 2 cm², pressure 50 kPa

MD = machine direction; CD = cross direction.

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DuPont™ Tyvek® 1073D

Product Properties—English Units

Product Features:
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Specification Properties (English Units)

Property	Comparable Test Method	Units	Tyvek® 1073D
Basis Weight	DIN EN ISO 536 (96) ¹	oz/yd ²	2.21 [2.12–2.30]
Delamination	ASTM 2724-07 ²	lb _f	0.393 [0.304–0.483]

Notes: All specification properties are typical values based on mill roll averages, with samples taken uniformly across the sheet.

1. Modified for size: 100 cm²

2. Modified for: result interpretation – length of delamination = 116 mm, width 25.4 mm, speed = 127 mm/min and clamp distance = 60 mm

Miscellaneous Properties (English Units)

Property	Comparable Test Method	Units	Tyvek® 1073D
Thickness	DIN EN ISO 534 (05) ³	mils	7.9
Opacity	ISO 2471 (98) ⁴	%	96.5
Tensile Strength, MD	DIN EN ISO 1924-2 (08) ⁵	lb _f	44.96
Tensile Strength, CD	DIN EN ISO 1924-2 (08) ⁵	lb _f	48.33
Mullenburst	ISO 2758 (01)	psi	174.0
Elmendorf Tear, MD	DIN EN 21974 (94)	lb _f	1.19
Elmendorf Tear, CD	DIN EN 21974 (94)	lb _f	1.19

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January 30, 2020

Re: Regulatory Information on Tyvek® graphics styles manufactured by DuPont Luxembourg -LU origin-

To Whom it may concern,

Below are statements concerning Tyvek® styles 1025D, 1056D, 1056K, 1057D, 1058D, 1070D, 1070K, 1073D, 1082D, 1442R, 1473R, 4158D, 4173D, 8740DL, manufactured by DuPont Luxembourg -LU origin-:

1. Product composition / Product information
2. REACH Regulation (EC) No 1907/2006
3. Oeko-Tex® Standard 100
4. Skin Irritation and Sensitization
5. Animal Origin
6. FSC (Forest Stewardship Council) certification
7. Timber Regulation (EU) No 995/2010
8. EU Packaging Directive
9. IMDS/GADSL
10. RoHS (Directive 2011/65/EU as amended)
11. WEEE (Directive 2012/19/EU as amended)
12. Food contact
13. Allergens
14. Halogens
15. Chemical substances

This statement is based on our current level of knowledge and covers commercial products as supplied by DuPont at the date of issue. Since conditions of use are outside the Company's control, DuPont makes no warranties, express or implied, and assumes no liability in connection with any use of this information.

I hope that this satisfies your request. Please feel free to contact me if additional information is needed.

Sincerely,



Marta Vicén | Product Stewardship and Regulatory Affairs
DuPont Safety & Construction
marta.vicen@dupont.com

Performance Specialty Products Ibérica, S.L.
Tomo: 4283, Libro: 0, Folio: 23, Sección: 8,
Hoja: AS 52181, Inscripción: 2, Fecha 13/12/2017

1. Product composition / Product information

- Product composition

Substance	CAS no.	Wt %
Polyethylene (HDPE)	9002-88-4 or others	> 95
Additives	Trade Secret	< 3

- Recyclability: the Tyvek® styles listed above as manufactured by DuPont Luxembourg can be readily recycled.
- Recycled content: the Tyvek® styles listed above might contain up to 15% of pre-consumer (from the production process) recycled material.
- Article Information Sheet can be downloaded at the following website link: www.dupont.com (bottom of the page, SDS FINDER)

2. REACH Regulation (EC) No 1907/2006

REACH bulletins are available upon request.

3. Oeko-Tex® Standard 100

The Tyvek® styles 1025D, 1056D, 1057D, 1058D, 1056K, 1070D, 1073D, 1082D, 1442R, 1473R, 4158D, 4173D, 8740DL are certified according to the Oeko-Tex® Standard 100, Appendix 4, product class II. Certificate available upon request.

4. Skin Irritation and Sensitization

The Tyvek® styles listed above or other similar Tyvek® styles with same product compositions have been tested for skin irritation and dermal sensitization in standardized tests. The test results indicated that the Tyvek® styles listed above or other similar Tyvek® styles with same product compositions are not skin irritants or contact sensitizers.

5. Animal Origin

The Tyvek® styles listed above may contain up to 500 ppm of a stearic (fatty) acid salt where the stearate group may be derived from tallow. Processing conditions of the raw materials used in manufacturing the DuPont™ Tyvek® fabrics meet or exceed the recommended conditions by European Directive 2000/6/EC, European Commission 2011/C 73/01 (also referenced as EMEA/410/01 Rev. 3 or EMA/410/01 Rev.3) or ISO 22442-1 Annex C for protection against TSE (Transmissible Spongiform Encephalopathy)/BSE (Bovine Spongiform Encephalopathy).

As such, to the best of our knowledge, the Tyvek® styles listed above as manufactured DuPont do not contain substances having the risks of transmitting TSE/BSE.

6. FSC (Forest Stewardship Council) certification

Not applicable. Tyvek® products manufactured by DuPont Luxembourg are made from high density polyethylene.

7. Timber regulation (EU) No 995/2010

Tyvek® products manufactured by DuPont Luxembourg are made from high density polyethylene, and do not contain any timber or timber products listed in the EU Timber Regulation (Regulation (EU) No 995/2010).

8. EU Packaging Directive

Regarding compliance with the European Union Packaging Waste Directive (EU Directive 94/62/EC):

1. Heavy Metals

DuPont does not intentionally add any of the heavy metals (lead, mercury, cadmium and hexavalent chromium) identified in the Directive, Article 11 as intentional ingredients during the manufacture of the Tyvek® styles listed above as manufactured by DuPont Luxembourg. However, please note that we do not routinely analyze our products for substances not intentionally added.

2. Dangerous Substances

The Tyvek® styles listed above as manufactured by DuPont Luxembourg do not contain any listed noxious and hazardous substances, as defined in the CEN Standard EN 13428(1) and Report TR 13695-2(2) above 0.1 wt%.

1) European Committee for Standardization, EN 13428:2004 – Packaging - Requirements specific to manufacturing and composition - Prevention by source reduction.

2) European Committee for Standardization, TR 13695-2:2004 – Part 2: Requirements for measuring and verifying dangerous substances present in packaging, and their release into the environment.

3. Recovery

a) Recycling: The Tyvek® styles listed above as manufactured by DuPont Luxembourg can be readily recycled.

b) Energy recovery: The Tyvek® styles listed above as manufactured by DuPont Luxembourg can also be valorized through industrial incineration, as they are composed of greater than 97 wt% of organic content, meeting the requirements of EN 13431:2004 - Packaging - Requirements for packaging recoverable in the form of energy recovery, including specification of minimum inferior calorific value.

c) Biodegradability: The Tyvek® styles listed above as manufactured by DuPont Luxembourg are not biodegradable.

9. IMDS/GADSL

DuPont has registered Tyvek® under the IMDS database. Information letter with registration ID and information on GADSL is available upon request.

10. RoHS (Directive 2011/65/EU as amended)

DuPont does not intentionally add any of the substances listed in Annex II of Directive 2011/65/EU, as amended, above the tolerated maximum concentration (as included below) as intentional ingredients during the manufacture of the Tyvek® styles listed above as manufactured by DuPont Luxembourg:

- | | |
|---|--|
| - lead (0.1%) | - polybrominated diphenyl ethers (PBDE) (0.1%) |
| - mercury (0.1%) | - bis(2-ethylhexyl) phthalate (DEHP) (0.1 %) |
| - cadmium (0.01%) | - butyl benzyl phthalate (BBP) (0.1 %) |
| - hexavalent chromium (0.1%) | - dibutyl phthalate (DBP) (0.1 %) |
| - polybrominated biphenyls (PBB) (0.1%) | - diisobutyl phthalate (DIBP) (0.1 %) |

Please note that we do not routinely analyze our products for substances not intentionally added.

11. WEEE (Directive 2012/19/EU as amended)

The substances listed below in Annex VII of the Directive 2012/19/EU are not intentionally added as intentional ingredients during the manufacture of the Tyvek® styles listed above as manufactured by DuPont Luxembourg:

- | | |
|------------------------------------|-----------------------------------|
| - polychlorinated biphenyls (PCB) | - hydrochlorofluorocarbons (HCFC) |
| - polychlorinated terphenyls (PCT) | - hydrofluorocarbons (HFC) |

- mercury
- brominated flame retardants
- asbestos
- chlorofluorocarbons (CFC)
- hydrocarbons (HC)
- refractory ceramic fibres
- radioactive substances

Please note that we do not routinely analyze our products for substances not intentionally added.

12. Food contact

The Tyvek® styles listed above have not been evaluated for meeting the requirements of food packaging regulations in the European Union or any other jurisdiction.

13. Allergens

The Tyvek® styles listed above do not contain substances or products causing allergies or intolerances listed in Annex II of Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers.

14. Halogens

The Tyvek® style listed above as manufactured by DuPont Luxembourg might contain a trace amount of residuals containing chlorine compounds from raw materials and processing aids used to manufacture the Tyvek® style listed above.

15. Chemical substances

The following substances are neither intentionally added during the manufacturing process nor do incoming raw materials contain them for DuPont Tyvek® styles listed above as manufactured by DuPont Luxembourg. Please note that we do not routinely analyze our products for substances not intentionally added.

- | | |
|--|--|
| - acid | - melamine |
| - antibiotics | - mercury |
| - asbestos | - optical brighteners |
| - azo compounds | - organic tin compounds |
| - bisphenol A | - PAH (polycyclic aromatic hydrocarbons) |
| - bisphenol B | - perfluorooctane acid (PFOA) |
| - bleaching agents (chlorine based and others) | - perfluorooctane sulfonate (PFOS) |
| - cadmium | - phthalates |
| - chlorinated paraffins | - plasticizers as ESBO (EC Regulation N° 372/2007) |
| - chromium VI | - polybrominated biphenyl (PBB) (EC Directive 2002/95/EC) |
| - dimethyl fumarate | - polybrominated diphenyl ether (PBDE) (EC Directive 2002/95/EC) |

- dioxins
- epoxy derivatives as BADGE, BFDGE and NOGE (EC Regulation N° 1895/2005)
- flame retardants
- formaldehyde
- gluten
- lead
- lignin
- polychlorinated biphenyls (PCB)
- polychlorinated naphthalenes (PCN)
- rubber/latex
- silicone
- tetrabromobisphenol A
- toluene
- vinyl chloride and polyvinyl chloride (PVC)

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Corona Treated

Specification Properties (Metric Units)

Property	Comparable Test Method	Units	Tyvek® 1057D
Basis Weight	DIN EN ISO 536 (96) ¹	g/m ²	55.0 [52.0–58.0]
Delamination	ASTM D2724-07 ²	N	1.6 [1.2–2.0]

Notes: All specification properties are typical values based on mill roll averages, with samples taken uniformly across the sheet.

1. Modified for size: 100 cm²

2. Modified for: result interpretation – length of delamination = 116 mm, width 25.4 mm, speed = 127 mm/min and clamp distance = 60 mm

Miscellaneous Properties (Metric Units)

Property	Comparable Test Method	Units	Tyvek® 1057D
Thickness	DIN EN ISO 534 (05) ³	µm	165
Opacity	ISO 2471 (98) ⁴	%	> 94.1
Tensile Strength, MD	DIN EN ISO 1924-2 (08) ⁵	N	135
Tensile Strength, CD	DIN EN ISO 1924-2 (08) ⁵	N	140
Elongation, MD	DIN EN ISO 1924-2 (08) ⁵	%	11.5–17.5
Elongation, CD	DIN EN ISO 1924-2 (08) ⁵	%	15–22
Mullenburst	ISO 2758 (01)	kPa	795
Elmendorf Tear, MD	DIN EN 21974 (94)	N	5.3
Elmendorf Tear, CD	DIN EN 21974 (94)	N	5.3

Notes: Miscellaneous properties are typical values based on mill roll averages, unless otherwise noted but are not warranted in any way, expressed or implied. Miscellaneous properties are not controlled in the process and are subject to normal process drift.

MD = machine direction; CD = cross direction.

3. Surface 2 cm², pressure 50 kPa

4. Modified for: backing standards, measuring area, and illumination = wide area.

5. Modified for: speed = 100 mm/min, width 25.4 mm and gauge length = 127 mm

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Product Properties—English Units

Product Features:
Antistatic Treatment
Corona Treated

Specification Properties (English Units)

Property	Comparable Test Method	Units	Tyvek® 1057D
Basis Weight	DIN EN ISO 536 (96) ¹	oz/yd ²	1.62 [1.53–1.71]
Delamination	ASTM D2724-03 ³	lb _f	0.360 [0.270–0.450]

Notes: All specification properties are typical values based on mill roll averages, with samples taken uniformly across the sheet.

1. Modified for size: 100 cm²

2. Modified for: result interpretation – length of delamination = 116 mm, width 25.4 mm, speed = 127 mm/min and clamp distance = 60 mm

Miscellaneous Properties (English Units)

Property	Comparable Test Method	Units	Tyvek® 1057D
Thickness	DIN EN ISO 534 (05) ³	mils	6.5
Opacity	ISO 2471 (98) ⁴	%	> 94.1
Tensile Strength, MD	DIN EN ISO 1924-2 (08) ⁵	lb _f	30.35
Tensile Strength, CD	DIN EN ISO 1924-2 (08) ⁵	lb _f	31.47
Elongation, MD	DIN EN ISO 1924-2 (08) ⁵	%	11.5–17.5
Elongation, CD	DIN EN ISO 1924-2 (08) ⁵	%	15–22
Mullenburst	ISO 2758 (01)	psi	115.3
Elmendorf Tear, MD	DIN EN 21974 (94)	lb _f	1.19
Elmendorf Tear, CD	DIN EN 21974 (94)	lb _f	1.19

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