

food processor supplies

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PRODUCT SPECIFICATION

BFTG4635 - TAG TUFLOK SPRING GREEN BOX 5000

		Style 1025D	Style 1056D	Style 1058D	Style 1059B	Style 1059D	Style 1070D	Style 1073B	Style 1073D	Style 1079	Styl e 108 5D	Test Method
Basis Weight, g/sq.m		42	54	54	64	61	68	75	75	97	108	ASTM D3776
Thickness, microns +/-3 Sigma Range		135 69-201	163 86-239	145 76-213	165 86-244	183 102-264	190 109-272	185 107-264	193 112-274	203 127-279	259 165- 353	ASTM D1777
Strip Tensile	(MD),N/cm (CD),N/cm	34 39	46 54	56 62	69 73	54 62	64 71	80 88	77 87	116 122	119 129	ASTM D1682(1)
Elongation	(MD),% (CD),%	12 18	14 20	18 23	19 23	15 21	17 21	20 25	19 24	23 28	22 26	ASTM D1682(1)
Work Break	(MD),Nm (CD),Nm	0.9 1.4	1.4 2.0	1.9 2.7	2.5 3.0	1.7 2.4	2.0 2.8	3.0 3.6	2.7 3.3	4.4 5.2	4.3 5.2	ASTM D1682(1)
Tear, Elmendor	f (MD),N (CD),N	5.4 4.5	5.8 5.4	3.0 3.1	3.4 3.4	5.8 5.4	4.9 4.9	3.7 3.8	4.4 4.2	3.5 3.5	5.4 5.8	ASTM D1424
Opacity, Colour	Quest, %	97	97	90	91	97	97	93	94	91	97	-
Porosity, Gurley Hill,sec		28	35	21	22	25	28	22	24	87	42	ASTM D726-84
Internal Bond,N/cm		0.46	0.47	0.79	0.84	0.49	0.56	0.88	0.74	1.30	0.86	ASTM D2724(2)
Water Resistance, Hydrastatic Head,cm		-	-	-	157	-	-	160	-	-	-	AATCC127
Treatment, Corona Anistat		Yes Yes	Yes Yes	Yes Yes	No No	Yes Yes	Yes Yes	No No	Yes Yes	Yes Yes Embossed	Yes Yes	

Notes:

- All values are nominal's except where otherwise noted
- MD is Machine Direction: CD is Cross Direction
- (1) Cut Strip: CRE tensile tester, crosshead speed 5cm./min; distance 12.7cm
- (2) CRE tensile tester, crosshead speed modified 12.7cm./min: distance 12.7cm peel

Disclaimer:

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Typical Properties of TAG TYVEK PTD 1-600 32X165 ROLL GK (cont'd)

Printing and Converting:

TYVEK can be printed by flexography, offset lithography, letterpress, gravure, screen process and ink-jet processes, using standard commercial printing equipment or thermal printing equipment. However. certain physical characteristics, such as a melting point of 275°F (135°C), lower absorption of water and greater thickness variation than paper, require special printing and converting procedures as outlined in the Guide to Printing and Guide to Converting. TYVEK is well suited to many converting It can be slit, sheeted, applications. stacked, scored, die-cut, embossed, hot foil stamped, heat-sealed, glued, grommetted and sewn. For specific recommendations and procedures, refer to the Guide for Converting.

Flammability: The flammability characteristics of TYVEK, a synthetic nonwoven material, are similar to those of most synthetic fibres. When exposed to a flame, TYVEK shrinks away rapidly. If the flame is made to follow the shrinking sheet, TYVEK will melt at 275°F (135°C) and if it is auto-ignition temperature of 650°F (343°C) is reached, TYVEK will burn.

Type 10 TYVEK typically has a flame spread index of 0 and a smoke developed value of 25 when tested in accordance with ASTM E-84-89a.

Types 14 and 16 TYVEK are rated 'Class 1 – Normal Flammability' by the Federal Flammable Fabrics Act for Clothing Textiles (16CFR-1610) TYVEK does not pass DOC FF 3-71, Children's Sleepwear Test. TYVEK and laminates of TYVEK are not intended for use in fire-retardant garments. Fabrics of TYVEK should not be used near heat, flame, sparks nor in explosive environments.

A Unique Combination of Properties

The physical properties, common to all three types of TYVEK, combine to make them ideal substrates for many printing and converting applications.

Improved Ageing Resistance:

TYVEK contains an antioxidant which provides an oxidative life in excess of 20 years. However, outdoor exposure of uncoated TYVEK is limited to a few months due to ultraviolet degradation. This can be significantly extended by coating a UV inhibitor which is available in a limited number of styles.

Outstanding Chemical Resistance:

TYVEK is inert to most acids, bases and salts. Prolonged exposure to oxidizing substances such as concentrated nitric acid or sodium persulfate will cause some loss of strength. Resistance to various acids and bases, oxidizing and reducing agents, salt solutions, and organic solvents is summarized in pages 18-22. In the case of chemical barrier properties of limited use/disposable protective apparel, the user should contact Bunzl for permeation data.

Superior Moisture Resistance: The physical properties of TYVEK are not affected by water; TYVEK is equally strong wet or dry under ordinary conditions and ambient temperature.

Good Liquid Barrier Protection: TYVEK offers good aqueous liquid splash protection and can be coated with polyethylene if additional protection is required. TYVEK laminated with Saranex* is recommended for protection from many organic liquids. Non-corona non-antistat treated styles of TYVEK (e.g. Style 1073B) have a hydrostatic head in excess of 50 inches (127cm). If antistat is applied, the hydrostatic head will drop to 40-50 inches (102-127cm). Corona treated and antistated TYVEK (e.g. Style 1073D) has a hydrostatic head less than 15 inches (38cm).

High Opacity: The high opacity of TYVEK is the result of multiple light refractions among the very fine polyethylene fibres and air within the densely packed sheet structure; no pigments, binders, delustrants, or whiteners are added.

Withstands Deformation: Elevated temperatures increase the sensitivity to tension-caused width loss and deformation. For example, Style 1073D can withstand 1.5 pounds/ lineal inch (2.6 N/cm) tension at room temperature, but at 225°F (107°C), tension in excess of 0.6lb/ lineal inch (1.1 N/cm) will cause permanent deformation.

Good Dimensional Stability: Sheet dimensions change less than 0.01% between 0 and 100% relative humidity at constant temperature.

FDA and USDA Status: Uncoated nonantistatic-treated sheets of TYVEK meet the requirements of the FDA and USDA for use as articles or components of articles intended for food packaging that involve temperatures up to and including 212°F (100°C). TYVAK with antistat can be used for garments that will come in contact with meat and poultry during processing. For some food packaging applications, a special grade of TYVEK is available which contains an FDA approval antistat. Inquiries about appropriate products should be directed to a Du Pont representative.

Porosity: Compared with most textile fabrics, the air permeability of *Types 10 and 14* TYVEK is low. Moisture-vapour transmission is much higher than that of plastic films and similar to that of coated papers.

Excellent Rot & Mildew Resistance:

Although mould and mildew can grow on TYVEK, it shows no degradation after being buried in soil for an extended period. Clean TYVEK will not promote the formation of mildew.

Soiling: Resistance is high to soiling by waterborne soils, but is low to absorption of oils and greases. *Types 14 and 16* can be laundered and dry-cleaned

Neutral pH: TYVEK has a neutral pH = 7. Therefore, it is neither acidic nor basic. The styles which are corona treated and antistatic treated also have a pH = 7.

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Remarkable Flexibility: TYVEK has outstanding flexural strength and will easily exceed 20,000 cycles when tested on an MIT flex tester (TAPPI method T-423).

Low-linting: Because TYVEK is composed of essentially continuous fibres it does not generate a significant amount of lint particles under conditions of ordinary use.

Light Weight: Type 10 TYVEK has a density of 0.38g/cc which is only half as much as paper.

Whiteness: TYVEK is one of the whitest materials available for printing. The GE Brightness of TYVEK (using the TAPPI Standard Test Method Technidyne Instrument) is 94.1. For purposes of comparison, a pure titanium dioxide pellet measures 93.8. Colour value or whiteness is also defined by L, a, b values. The Hunterlab Model D-25 colour difference metre measures the brightness, colour components and whiteness. The following values were obtained for TYVEK –

L = 98.7 brightness (100 for perfect white) a = 0.4 green component b = 0.1 yellow component w = 96.5 overall colour acceptance Static: In some processing steps, TYVEK may generate static electricity unless treated with antistatic agents. These agents, while suppressing generation static and increasing wettability, have no effect on sheet strength. Most types and styles of TYVEK as supplied by Bunzl are treated with antistatic agents. All treated styles of Types 14 and 16 pass the surface resistivity requirements as set forth in paragraphs 4-6.6.3 of Standard 56A entitled 'Standard for the Use of Inhalation Anesthetics' issued by the National Fire Protection Association.

This topical antistat is water soluble and is not intended as a 'safety' feature. For this reason, it s recommended that garments of TYVEK not be used in flammable or explosive environments.

*TYVEK does not meet the requirements under the Federal Flammable Fabrics Act for Children's Sleepwear, FF371 and FF5-74

Suche Butcher.

Julie Butcher Business Analyst/ Quality Assurance Manager



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