

SEWING AND WASHING GUIDELINES

For Paper-Like (Type 10) and Fabric-Like (Types 14 & 16) Tyvek®

Tyvek® is a DuPont™ trademark for a family of tough, durable sheet products. Made from 100% high-density polyethylene fibers, Tyvek® is manufactured in a unique flash-spinning process without the use of binders. Tyvek® is formed by a continuous process from very fine 0.5-1.0 micrometer fibers – 50X smaller than a human hair. These fibers are first spun and then bonded together by heat and pressure until a solid sheet structure is formed.

Without a doubt, Tyvek® combines all the best physical properties and characteristics of paper, film, and fabric – in one exceptional material. While most products offer water resistance or breathability, Tyvek® offers both. Tyvek® is equally strong and protective wet or dry. It is lightweight, flexible, smooth, particulate free, opaque, and resistant to water, rot & mildew, chemicals, abrasion, and aging. All Tyvek® styles are acid free with a neutral pH=7. Its unique combination of properties makes Tyvek® ideal for a broad range of applications.

A choice of hard-structure

Type 10 or soft-structure Types 14 and 16

Type 10 styles of Tyvek®, also referred to as “hard-structure”, form a smooth, stiff, non-directional paper-like substrate. Typical everyday uses most are familiar with include FedEx & mailing envelopes, graphics, and HomeWrap®™. Other uses for Type 10 Tyvek® styles include protective packaging, interleaving and protecting metals, marble, plexiglas, table tops, and valuable art work. Tyvek® is also used as a lining in overseas crates and containers, as well as any application where protection from water, dirt, and environmental pollution is necessary.

Type 14 styles of Tyvek®, known as “soft-structure”, are “soft”, point-bonded products with an embossed pattern, providing a fabric-like flexible substrate with outstanding tear resistance. Easily sewn into covers and sleeves, you can custom fabricate Type 14 to suit your specific needs.

A great way to make Type 14 Tyvek® styles even softer

As an alternative to washing, we recommend cutting off the amount you need, squishing it into a ball, and manipulating it with your hands. Repeat this process at least twice by reopening the piece and balling it up again - you will be amazed how soft the Tyvek becomes.



Sewing Type 10 Tyvek®: Paper-Like

- Use 3-5 stitches/inch (1.2-2 stitches/cm) at low tension to eliminate skipping.
- Use #306 (Union Special) or #14 (Singer) needle, or equivalent.
- Use a flat tipped needle that cuts slit-like perforations. “Rock Point” (Union Special) or “Narrow Wedge” (Singer) will permit top speed operation with the same thread used for round-point needles.

The informal industry standard of 25/4 tex (24/4cc) glaze thread of short staple cotton in #14 and #036 needles have given satisfactory performance in outdoor banners when coupled with 16.5/3 tex (36/6cc) soft looper thread. If smaller diameter thread is required, 14.5/4 tex (40/4cc) glaze thread of “Sak” quality should provide satisfactory results.

Sewing Type 14 and Type 16 Tyvek®: Fabric-Like

Up to 12 stitches/inch (4.7 stitches/cm) can be used: however, 6-8 stitches/inch (2.4-3.1 stitches/cm) provide the highest seam strength (greatest resistance to postage stamp tear).

- Use a fine-tooth feed dog - 12 to 21 teeth/inch (4.7-8.3 teeth/cm)
- Decrease presser-foot tension until the sheet just feeds through the machine without slipping. About 10 lb. (4.5 kg) force should be sufficient.
- Decrease bobbin tension until the bobbin just slips down the thread: 3 oz. (85g)
- Wind bobbin with thread tension set so that the thread just slips through the disc: 2 oz. (57g)
- After setting bobbin tension, adjust needle tension to produce a balanced stitch.
- Conventional threads of cotton/synthetic or 100% polyester may be used.
- Spun-filament polyester is stronger than cotton thread and is preferred for flame-resistant considerations.

Washing Instructions and Flammability

*Hand wash with mild soap. No bleach – or machine wash, gentle cycle, cold water. Drip dry only. Do not put in a dryer, dry clean, or use an iron on this fabric.

**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. Fabrics of Tyvek should not be used near heat, flame, sparks, nor in explosive environments.

The physical properties of Tyvek are not affected by water: Tyvek is equally strong wet or dry under ordinary conditions and ambient temperatures. Tyvek® meets all the requirements of the USA Flammable Fabrics Act, CA-191-53, for wearing apparel. Tyvek® is not intended to be used in applications where it will be walked upon.

Flammability: Clean untreated Tyvek® shrinks away from the heat of an open flame without igniting. It will begin to shrink at 244°F (118°C) or melt until 275°F (135°C). Its auto-ignition temperature is 650°F (343°C)

Tyvek® is slippery and should not be used in applications in which it will be walked upon.

DuPont™ Tyvek® is a trademark of DuPont for its brand of protective material.



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