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A Deep Dive into UPF50+ Performance Apparel Trends

What to know about standards and opportunities in this accelerating market.



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Newsflash: Apparel is flat as a percentage of disposable income. While analysts anticipate moderate growth in 2022 due to pandemic-induced pent-up demand, apparel is searching for its own resurgence with consumers. This may sound grim, and for the likes of Brooks Brothers and the neo-classical local men’s store downtown, it is. But as is the case in almost any categorical statement, the devil is in the details, wherein lies good news for the people who put ink on threads and needle into fabric. In this case, it is those UPF50+ fabrics apparel decorators should be paying close attention to ... they are this trend’s trend.

What is UPF?

UPF (ultraviolet protection factor) is a rating designation for sun-protective textiles and clothing, representing the ratio of sunburn-causing UV measured without and with the protection of the fabric. For example, a fabric rated UPF 30 means that, if 30 units of UV fall on the fabric, only one unit will pass through to the skin. A UPF 30 fabric that blocks 29 out of 30 units of UV is

therefore blocking 96.7%. Most “regular” shirts will have a UPF rating between 8 and 20.

Unlike SPF (sun protection factor) measurements that traditionally use human sunburn testing, UPF is measured by using a laboratory instrument (spectrophotometer or spectroradiometer) and an artificial light source, and then applying a sunburn weighting curve (erythral action spectrum) across the relevant UV wavelengths. Theoretically, human SPF testing and instrument UPF testing generate comparable measurements of a product’s ability to protect against sunburn.

How UPF50+ Got to This Moment

Trends build upon themselves. The phrase “Casual Friday” was coined to refer to the relaxed office dress codes some businesses would allow as the workweek drew to a close.

But the move from casual Friday to casual everyday has had a major impact on the landscape of household apparel brands. Casual Friday started with no tie and docksiders and morphed into hoodies and jeans. This trend was accelerated by the likes of Steve Jobs and Mark



Zuckerberg and other success icons. Casual Friday even had an episode of “The Office” dedicated to it where the character Meredith took it to new comedic levels.

Adding to the casual everyday movement is the athleisure market. Athleisure is officially defined as “casual clothing designed to be worn both for exercising and for general use.”

Lululemon is often credited with kick-starting the athleisure movement. The brand had a fiercely loyal following in its infancy and maintained privileged price points by

hyper-focusing on the nuances of the space and its core customer. This style is now benefiting from a change in work-life-location trends.

Most may not think of Jane Fonda, Jazzercise, and leg warmers when they go to Lululemon’s site or enter a retail location. But they should — they are the forefathers and path finders that led to their favorite brand. How many of these consumers would be even more shocked to find out it all started in the late ‘50s with a chemist from New Jersey. Joseph Clois Shivers, Jr., a textile chemist in the U.S., is the mind behind the thermoplastic elastomer, an integral part in the development of spandex, during his time with the company DuPont.

Enter COVID: A Trend and Demand Build Fast

And then comes a pandemic. Though not the first pandemic, it is the first one that allowed over 50% of citizens to go on with relatively small changes to their economic life. Many are now remote. Disposable income for some gets re-budgeted. Home gyms are in. Everyone is trying to get outside. Boats and pools are selling like hot cakes. Amazon is booming. Retail is changing. Demand for print-on-demand is skyrocketing. The planet is getting warmer. Regional travel by car is replacing island getaways. The sun is getting stronger. And, all of a sudden, athleisure wants more protection from the sun.

A fabric must have a UPF of 30 to qualify for The Skin Cancer Foundation’s Seal of Recommendation.

Source: skincancer.org



UPF50+ clothing — also known as SPF shirts, rash guard shirts, sun shirts, cool wicking shirts, sun-protective clothing — is feeling the momentum from recent changes in consumer behavior and work-life balance. Like many trends before this, it may have long-lasting stickiness with the consumer.

Nowhere is the demand more obvious than in the Southern half of the U.S. Building on the poly-performance trends of UnderArmour, UPF50+ is the next logical feature to come into play. The trend has spawned myriad UPF50+ performance brands in the outdoor and fishing markets. Huk, AFTCO, Pelagic, Mojo Sportswear, Pure Lure, and many others are all focused on this customer segment.

But that’s just fishing. This type of garment feature hits many markets at one time. While most UPF apparel also has moisture-wicking and antimicrobial characteristics, the common thread is simple: People are outside. In the last 12 months, this is a segment of the apparel market that has grown. This garment segment also relies heavily on digital sublimation printing. At the height of last summer, many sublimators found themselves very busy with personal protective equipment,

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American Society for Testing and Materials Standard for Sun Protective Clothing and Swimwear

UPF Rating	Protection Category	Percent of UV Radiation Blocked
UPF 15-24	Good	93.3-95.9
UPF 25-39	Very good	96-97.4
UPF 40-50+	Excellent	97.5-98+

Also rapidly growing in the youth segment, UPF50+ apparel is not only for hot beach days, but is also sought after as a base layer for the skiing market.



Things to Consider when Selecting a UPF50+ Apparel Partner

- Any company that sells UPF/ sun protection clothing should be able to provide third-party testing data to prove the advertised UPF rating.
- Sublimation is a great way to decorate UPF clothing, so be sure this is an option with the vendor.
- Does your vendor offer UPF50+ clothing, multiple decorating services, and fulfillment services? A one-stop shop can prevent finger-pointing and production delays.
- Some UPF clothing will lose its UPF rating from washing and drying. Conversely, some brands will see their ratings increase from the same washing and drying. Make sure you are selecting quality that supports the sun protection claims you make to your clients for the long term.
- UPF hangtags should be available to ensure your clients can share the sun protection message easily.
- Certifications matter. Not all garments are recognized by the Skin Cancer Foundation, Melanoma Foundation, or others. Ask the vendor about it.

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but also with UPF50+ clothing as the outdoor markets fed orders all year long.

This market has also grown rapidly in the youth segment. Anyone who has ever chased a kid around at the beach to cover them with sunscreen understands. Parents and the retailers selling to them at the beach want these garments on these kids when they are in the water or anywhere else. Boy Scouts, National Park retailers, and resort destination retailers want UPF too. For many, it is sublimation that is the preferred decorating technology.

The need for UPF50+ is not only for the hot days in the panhandle of Florida — this type of apparel is also sought after as a base layer for the skiing market. The hiking and core outdoor markets are not far behind, especially when the performance features are year-round benefits. Higher-quality UPF fabrics can also serve as a base-layer garment.

Decorating UPF50+ and the Sublimation Sweet Spot

This market has grown accustomed to sublimation transfer. This makes sense given the need for breathability, and the polyester content of the apparel (polyester and polyester/Lycra fabrics are dominating the UPF market).

Perhaps the most specific reason sublimation and UPF50+ go hand in hand is that light colors are the standard for this market segment. Yes, there are of course darker colors that make up part of the UPF50+ apparel market, but dark colors tend to be less popular as they increase body temperature when worn in the sun. Light colors, such as sea grass, sky blue, and pearl gray, lend themselves to this

segment more than black and brown.

Sublimation and certain types of direct-to-garment (DTG) platforms can bring this category to life, and print-on-demand together, to form a profitable product offering to organizations and brands. While many think of sublimation in terms of cut and sew, this market has a large “spot print” market that is driving many local print shops’ adoption of the printer platform. Sublimation’s unmatched substrate flexibility only makes it more appealing to traditional screen printers who are looking at the “Mezzanine Level” printers available from several sublimation-focused distributors.

The term “Mezzanine Level” refers to that sweet spot between 24" and 54" printers. What apparel decorator that is not doing cut and sew needs a larger printer than that? What Etsy entrepreneur wants a bigger equipment footprint than that? These folks want heat presses that run on 110V.

There are a couple of printer platforms that have lowered the cost on ink and paper dramatically for printers as small as 24". Roll-feed paper is another recent innovation for the 24" environment. This democratization of cost structure could not have come at a better time when COVID-19 overtook the economy. That may partially explain why demand has far outstripped supply.

This market trend is continuing as the world takes on the second year of the pandemic. Business owners and managers need to think through these trends and identify the right fit for their businesses. The outdoor trend is not about to slow down. There are plenty of people who feel they have not been able to enjoy vacation due to economic tumult. The time is now to go print for them. ■

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