Neon Colors: Achievability on PET and PTT fibers

We have previously discussed the limitations of color achievability and colorfastness of neon colors on cotton.

However, an excellent neon gamut can be achieved on both woven and spun polyester and stretch PTT fiber such as Sorona®, using Dianix® Luminous dyes in conjunction with selected bright Dianix® dyes. Through this method, fluorescent yellows, pinks, oranges, lime greens can be attained, supplemented by bright turquoise, royal blue, and violet shades.

Here are some characteristics:

- Colorfastness to light (AATCC 16) averages 4-5 ( 10AFU ) and 4 ( 20AFU ) which are excellent for apparel or articles exposed to the outdoors.
- Wet fastness is also excellent; averaging change of shade 4 and stain of adjacent fibers 4 tested to AATCC 61-2A at 49 Degrees Celsius.
- In the case whereby chlorinated water fastness is required, the fastness to 20 ppm active chlorine ISO 105 E03 averages grade 4.

The spun polyester and stretch PTT fibers provide a soft handle in a knitted construction, and if a proportion of cotton is required, then a blend with up to 20% cotton can provide a near solid effect using the selected Dianix® Luminous dyes.

To assist designers in identifying the required shades, Color Solutions International has developed “Active Brights”, which is a palette of neon colors for polyester.