Special Claims Seminar
Agenda

- Truth In Labeling
- Review Special Claims
- Examples of Hang Tags
Importance of Special Claims

- Traditional textiles are no longer competitive
- Consumers are demanding more function and features in textile products
- Technical Textile markets are more application specific and demanding
- Strict adherence to product specification and quality standards are critical
- Need for clear communication between the buyer and supplier
It’s the Law - Truth in Labeling

- **FEDERAL TRADE COMMISSION – FTC**
  - Government agency responsible for labeling


  This statute deals with mandatory content disclosure in the labeling, invoicing, and advertising of textile fiber products. Under the Act, misbranding is unlawful, as is falsely or deceptively invoicing or advertising textile fiber products.

- False Marketing Claims are deceptive advertising
FTC Violations

- FTC Charges Companies with 'Bamboo-zling' Consumers with False Product Claims
- Bamboo-based Textiles, Actually Made of Rayon, Are Not Antimicrobial, or Made in an Environmentally Friendly Manner, or Biodegradable
- **FTC quote** “Any claims you make about your textile products have to be true and cannot be misleading. As the seller, you must have substantiation for each and every claim — express and implied — that you make.”
- EPA - Crocs to Pay $230,000 for False "Antimicrobial" Claims
SPECIAL CLAIMS
Special Claims – Wrinkle Resistance

- **Wrinkle Resistance / Stay Smooth Technology** - *Ability to resist creasing, wrinkling, folding deformations in washing.*

- **Used on fabrics/garments with durable press / wrinkle free claims.**

- **Common Terminology**
  - No Iron
  - Easy Care
  - Wrinkle Free

- **Resin finishes are generally associated with anti wrinkle properties.**
Special Claims – Wrinkle Resistance

- Test Method - AATCC 143, 124, 88
- Visually evaluate after 5 Washes
  - Fabric smoothness
  - Seam puckering
  - Crease Retention
Special Claims – Crush Proof

- Crush Proof - *determining the appearance of textile fabrics after induced wrinkling*

- Wrinkle Recovery of Fabrics: Appearance Method
  - Test Method - AATCC 128
  - Class 4
Special Claims – Anti Fade

- **Anti – Fade** – Resistance to color loss in laundering
- *Colorfastness to Laundering*
- **Test Method - AATCC 61 or 150**
- Visually Evaluate after 5/10/15 home launderings
- **Shade Change Rating: Class 4 minimum**
Special Claims – Anti Pill

- **Anti – Pill** – *Finish used to resist formation of pills.* *Usually as a topical application.*

- **Test Method - AATCC 150**

- **Visually Evaluate after 5/10/15 home launderings**

- **Test Method – ASTM D3512 – Random Tumble**

- **Pill Rating: Class 4.0 minimum**
Special Claims – Comfort Stretch

- **Comfort Stretch** – *Fabric containing 1% or more of spandex*

- **Stretch & Recovery**

  Provides freedom of movement experienced in the wearing of a garment that contains spandex, or has stretch engineered into a yarn through mechanical stretch construction

- **Test methods**
  - ASTM D2594 - knit fabric
  - ASTM D3107 – woven fabric

- “*Stretch added for Comfort*”
Special Claims – Mechanical Stretch

- **Mechanical Stretch** – *Fabrics with stretch properties but contain no spandex*

- Stretch engineered into a yarn through mechanical stretch construction or in finishing process

- **Stretch & Recovery**

- Test methods
  - ASTM D2594 – knit fabric
  - ASTM D3107 – woven fabric

- “Stretch added for Comfort”
Special Claims – Lightweight

- **Lightweight, Ultra Lightweight** – *Fabric weighing less than 3 oz*
- **Weight**
- **Test Method – ASTM D3887, 3776**
- *Fabrics weighing less than 2.6 oz must be tested for flammability*
Special Claims – High Density

- High Density Surface – Density is mass per unit volume
- Weight
- Test Method – ASTM D3887, 3776
- Need to define what is considered “High Density”
Special Claims – Mercerized

- **Mercerization**: *adds luster and strength to fabric or yarns*
  - Cellulosic fibers treated with sodium hydroxide which chemically changes the fiber structure
  - Increases the surface area and reflectance, and gives the fiber a softer feel
- **Test Method – AATCC 89**
  - Determines the presence of mercerization
**MOISTURE MANAGEMENT** - Moisture management is the control of perspiration, water absorption and the chilling effect which occurs during evaporation.

The wicking ability of a fabric helps pull the moisture away from the wearer’s skin.

Various tests are conducted to determine a fabric’s moisture management properties: These include:

- Absorption
- Air Permeability
- Wicking performance
- Drying Rate of a fabric
Special Claims – Moisture Management

- **Liquid Moisture Management Properties of Textile Fabrics**

- *Ability of fabric to manage changes in moisture*

- **Test Method – AATCC 195**

- Results are based on:
  - water resistance,
  - water absorption
  - Water transport
  - water repellency
  characteristics of the fabric structure
Special Claims – Moisture Management

- **Air Permeability** – *Ability for air to flow through a fabric; porosity*
- **Test Method - ASTM D737**
- Knit: ≥ 160 cfm
- Woven: ≥ 20 cfm
Special Claims – Moisture Management

- **Wicking** – *Ability of a fabric to transport moisture through a fabric, either vertically or horizontally.*

- **Vertical Test Method - AATCC 197**
  - Knit & Woven: ≥ 6 inches after 30 minutes

- **Horizontal Test Method ASTM D5802 / AATCC 198**
  - Knit: 0.035 g/second
  - Woven: 0.020 g/second
Special Claims – Moisture Management

- **Breathability** – The movement of water or water vapor from one side of the fabric to the other

- **Water vapor permeability** Test Method - BS 7209
  - ≥ 80%

- **Moisture Vapor Transmission** Test Method - ASTM E96
  - (B) Upright Cup Method
  - Test Original State / 3 Home Launderings
  - ≥ 500 g / sq. meter / 24 hours
Special Claims – Moisture Management

- **Breathable Membrane:** A coating or laminate application which allows transportation of water vapor to the outside while keeping water away from the skin

- **Moisture Vapor Transmission** Test Method - ASTM E96
Special Claims – Moisture Management

- **Absorbency** - *The ability of a fabric to take in moisture.*
- *Important property which effects*
  - skin comfort
  - static build-up
  - shrinkage
  - stain removal
  - water repellency, and
  - wrinkle recovery

- **AATCC 79**
  - 5 seconds maximum
  - Test Original State & after 1 wash
Special Claims – Moisture Management

- **Quick Dry** - A “Quick Dry” fabric can move sweat away from the body to the outer layer of fabric and dry faster than other fabrics.

- **Quick Dry (Drying Rate)**

- **JIS L1096 / JIS L10184**

- $\geq 50\%$ after 30 min.

- **AATCC 199 – Drying Time**
Good quality fabric wicks away sweat and dissipates it quickly. Sublimated graphics are brilliantly bold yet do not inhibit breathability. Its windproof material will keep you warm in the cold weather. This pair of Men's Cycling Pants will improve your performance and comfort.
Special Claims – Odor Resistant Claims

- **ANTIMICROBIAL/ANTIBACTERIAL** - The use of antimicrobial agents in safeguarding fabrics against bacterial growth and odor development.

- *Don’t over claim anti-microbial functions*

- *Public health claims such as “Kills Bacteria” chemicals must be registered with EPA*
Special Claims – Odor Resistant Claims

Acceptable Claims

- Contains Anti-microbial agent to control odors
- This product has been treated to resist bacterial odors
Special Claims – Odor Resistant Claims

**Test Methods –**

- **JIS L1902** (Quantitative)
  - Log B – Log C ≥ 2.2
- **AATCC 100** (Quantitative)
  - Greater than 90% Bacterial Reduction
- **AATCC 147** (Qualitative)
  - No Growth - After claimed number of washes
**Special Claims – Water Repellent**

- **Water Repellent** - *Fabric that has been treated and is able to resist wetting, but is not water resistant or waterproof*

- Water sprayed on fabric surface produces a wetted pattern whose size depends on the relative repellency of the fabric.

- Visual evaluation comparing the wetted pattern with pictures on a standard chart.

- **Test Method AATCC 22 – Spray test**
  - Original: 90 minimum
  - After 5 washes: 80 minimum
Special Claims – Water Resistant

- **Water Resistant** - *Ability of fabric to resist wetting and penetration by water.*

- *US Customs uses the rain test to determine import duty rate for coated fabrics*

- **Water Resistant (Rain Test) when harmonized code is required**

- **Test Method - AATCC 35**
  - <1gm @ 600mm @ 2 min.
  - No water weight increase greater than 1.0 g allowed
Special Claims – Waterproof

- **WATERPROOF - *Impenetrable by water***
- **Hydrostatic Pressure** – *Measures the force required for water to penetrate a material, including seams*
- **Test Method - AATCC 127**
- **Test Original State/ 3 Home Launderings**
  - Good – 3,000 mm – No leakage
  - Better – 5,000 mm – No leakage
  - Best – 10,000 mm – No leakage
- Waterproof garment must be constructed with **Critically Seam Sealed / Critically Taped Seams** – *Refers to coating or sealing process of a seam to keep water out.*
Special Claims – Waterproof Breathable

- WATER PROOF BREATHABLE

- Hydrostatic Head
  - > 5,000mm

- Test Method - AATCC 127 / ISO 811

- Breathability - The movement of water or water vapor from one side of the fabric to the other caused by capillary action, wicking, chemical or electrostatic action

- Breathability
  - BS 7209
  - ≥ 80%
Special Claims – Waterproof / Wind Resistant

- **WINDPROOF / WIND RESISTANT**
- **Air Permeability** - Ability for air to flow through a fabric; porosity
- **Test Method - ASTM D737**
- **Windproof**
  - <1 cfm
- **Highly Wind Resistant**
  - 1-4 cfm
- **Wind Resistant**
  - 4-20 cfm
Special Claims – Thermal Properties

- THERMAL RESISTANCE

- Thermal Insulating / Reduces Cold - Measures heat transfer from a warm, dry, constant temperature, horizontal flat-plate up through a layer of the test material to a relatively calm, cool atmosphere and calculates the resistance of the material.

- The measurements are made under still air conditions (Option #1) or with a horizontal air flow over the specimen (Option #2).

- Test method - ASTM D 1518 or F1868

- Thermal Insulating
  - As Specified (Depends on wearing condition)
Special Claims – UV Resistance / Protection

- **UV RESISTANCE / PROTECTION**
- **UPF-** *Ultraviolet protection factor rating.*
- Ultraviolet Protection (UPF)
  - 15 - 50+
- Test Methods –
  - AATCC 183 – Transmittance Rating
  - ASTM D6554 - Preparation of Textiles
    - Laundering – 40 cycles
    - Sunlight Exposure – 100 hours
    - Chlorinated Pool Water - Swimwear
  - ASTM D6603 - Labelling
## Special Claims – UV Resistance / Protection

<table>
<thead>
<tr>
<th>UPF Range</th>
<th>Protection Category</th>
<th>Effective UVR Transmission, %</th>
<th>UPF Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td>Good Protection</td>
<td>6.7 to 4.2</td>
<td>15, 20</td>
</tr>
<tr>
<td>25-39</td>
<td>Very Good Protection</td>
<td>4.1 to 2.6</td>
<td>25, 30, 35</td>
</tr>
<tr>
<td>40 to 50, 50+</td>
<td>Excellent Protection</td>
<td>&lt;2.5</td>
<td>40, 45, 50, 50+</td>
</tr>
</tbody>
</table>
Special Claims – Sunlight Resistance

- **Sunlight Resistance** – *Fabrics that resist fading or color change when exposed to sunlight*

- **Colorfastness to Light**
  - AATCC 16 Option 3
  - Class 4
Special Claims – Stain Resistance

- **STAIN RESISTANCE** – *Ability of a fabric to resist staining by specified stains*

- **Oil Repellency**

- **Test Method - AATCC 118**
  - Initial: 6
  - After 20 washes: 4

- **Aqueous Liquid Repellency**

- **Test Method - AATCC 193**
  - Initial: 6
  - After 20 washes: 4
Special Claims – Stain Resistance

- **Spray Rating**
- **Test Method - AATCC 22**
  - Initial: 100
  - After 20 washes: 80
Special Claims – Soil Release

- **Soil Release** - *Ability of the fabric to release stains after washing.*

- **Test Method** - AATCC 130
  - Oily Stain
  - Food Stuffs

- **After washing** - Class 4 minimum
Special Claims – Antistatic

- **ANTISTATIC** – *Finish applied to reduce the electrostatic discharge on garments.*

- **Cling Test**
  - **Test Method** - AATCC 115
    - Cling Time $\leq 100$ s

- **Surface Resistivity**
  - **Test Method** – EN 1149-1
    - $2.5 \times 10^{11}$ ohm

- PPE garments used in environments where there is a risk of explosion
Special Claims – Chlorine Resistant

- **Chlorine Resistant** - *Generally associated with spandex*

  DuPont has patented a spandex fiber made from a segmented polyurethane polymer with improved resistance to chlorine-induced degradation.

  - the inclusion of finely divided zinc oxide particles dispersed in the fiber.

- Used mainly for swimwear

- Some companies use this tag on styles that are either 100% polyester or styles that use chlorine resistant spandex
Special Claims – Chlorine Resistant

■ **Test methods:**
  - Loss of strength after exposure to chlorinated pool water
  - Loss of stretch & recovery after exposure to chlorinated pool water
Eco Friendly

- **Eco Friendly – Sustainable Material** - Broad term used to define products which have little or no impact on the environment and help to protect the environment.

- **Use renewable content such as:**
  - Hemp
  - recycled plastic bottles
  - organic cotton
  - recycled rubber scraps
  - vegetable dyes, etc.
HANGTAGS
Comfort Stretch

- Comfort Fit
- Stretch
Chlorine Resistant

- polyester spandex blend
- fabric is chlorine resistant, retains color and shape, and provides high UV protection
Feel cool in all conditions with ADAPTIVE by HeiQ. This unique Swiss technology responds to your body temperature and perspiration - keeping you cool when the heat is on. ADAPTIVE technology is intelligent and dynamic, so you stay comfortable and dry around the clock.
• Moisture Wicking
• Easy Care
• UFP 40 – 50+
• Moisture Wicking
• Easy Care
• UFP 50+
• UFP?
Durable Water Repellency
Sheds rain and snow
Provides protection from surprise changes in the weather
Quick-drying
4-Way Stretch fabrication allows greater mobility & maintains shape

Moisture Transport System wicks sweat away from the body

Anti-Odor technology prevents the growth of odor causing microbes

30+ UPF protects your skin from the sun’s harmful rays
More than fabric, but science
Feel the future science

www.ventexkorea.com

Quick dry fabric

HEALTHA+®

What's HEALTHA+®?

- Fast Absorbing Functional Fabric
- Fast Drying Pleasant Fabric
- U.V. Protective Skin Care Fabric
- Odorless Hygienic Fabric

Moisture flows to the outside through the channels.

Multi-Functional

Owing to the special yarn and nano technology, HEALTHA+® functions as excellent sweat absorbent by capillary actions far more than cotton fabric. HEALTHA+® yarn has wider unit surface than regular fibers, which gives more contact surface to the air circulation dries much faster.

www.ventexkorea.com
Cool Touching
Long Term Cooling
Wicking & Absorption
UV Cut
Conclusion

- Claims must be true
- Claims must be verified
- Claims are regulated in US by FTC and are enforceable
- Communicate requirements and expectation to suppliers
- Function cannot be tested or inspected into a product
Special Claims

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