

# DLI's Textile Testing Laboratory

DLI's testing services are available on a per-fee basis, but many clients establish yearly contracts to facilitate a reliable quality control program. Submitting items for testing:

Apparel: Send one garment to be reserved as a control, and one garment for each cleaning process to be tested

Fabric: One linear yarn of fabric is sufficient for most testing. Additional fabric may be necessary for flammability testing.

## Abrasion Resistance

Stoll Flat inflated diaphragm ASTM D 3886  
Stoll Flex inflated diaphragm ASTM D 3885  
Upholstery (Wyzenbeck) ASTM D 4157

## Analysis, Chemical

AATCC Test method  
(in conjunction with other tests)

## Antiperspirants or Deodorants

Staining: Drycleaning or Laundering (DLI method)  
(5 applications on 8 fiber types)

## Appearance Rating

Appearance AATCC 143  
General Observation AATCC 124  
Crease Resistance AATCC 88C  
Wrinkle Resistance AATCC 128

## Autoclaving

Per cycle (steam sterilization)

## Cleaning Process per Cycle

Commercial Laundry  
Home Laundry  
Drycleaning

## Colorfastness

Bleaching AATCC 3 or AATCC 101  
Crocking (dry and wet) AATCC 8  
Drycleaning-accelerated AATCC 132  
Gas Fading, AATCC 23 (per cycle)  
Gray Scale Evaluation, AATCC methods  
Heat, AATCC 133 (per temperature)  
Laundering-accelerated AATCC 61  
Light, Xenon-arc AATCC 16 (up to 20 hrs)  
Perspiration (acid) AATCC 15  
Sublimation to Heat AATCC 117  
Water, AATCC 106, 107, 162 0

## Dimensional Change

Knits, AATCC 160  
Structured Garments, AATCC 150  
Unstructured Fabrics, AATCC 96, 135

## Fabric Characterization

Thickness ASTM D 1777  
Thread Count (pile fabric) ASMT D 3775  
Thread Count (woven or knit) ASTM D 3775, 3887  
Yarn size and Construction, ASTM D 1059  
Yarn Twist Count ASTM 1422,  
Weight (linear or square yard) ASTM D 3776

## Fiber Content

Fiber Percent (%), AATCC 20A Quantitative  
Microscopic, AATCC 20 Qualitative

## Flammability Tests

Children's Sleepwear  
16 CFR 1615; 16 CFR 1616  
(FF3-71, FF 5074)  
Wearing Apparel  
16 CFR 1610, CS 191-53  
NFPA 701 Flammability  
Small scale

## Oil Repellency

AATCC 118

## pH of Extract

AATCC 81

## Pilling Resistance

Random Tumble Method, ASTM 3512

## Snag Resistance

(Mace Tester) ASTM D 3939

## Reflectance Measurements

(Grayness, yellowness, whiteness, etc.)  
AATCC 110, ASTM E 313

## Stain Release

Up to 10 stains aged -1 day, 1 week, 1 month  
Wash or Dryclean  
Oily Stain Release AATCC 130  
Pile Floor Covering

## Strength Tests

Bursting Strength  
Ball Burst, ASTM D 3787  
Mullen, ASTM D 3786  
Tear Strength  
Elmendorf, ASTM D 1424  
Tongue, ASTM D 2262  
Tensile Strength  
Grab Test ASTM 5034 (fabric or seams)  
Seam Slippage, ASTM D 434 (apparel)  
Seam Slippage, ASTM D 4034 (upholstery)  
Strip Test, ASTM 5035  
Yarn or Single Thread, ASTM 2256

## Stretch and Recovery

Elastics, ASTM D 1775  
Knits, ASTM D 2594  
Wovens, ASTM D 3107.

## Water Absorbency

Rate of Absorbency (Wiareck)  
Total Absorption (Macy's, Haven's)

## Water Repellency

Impact Penetration, AATCC 42  
Rain Test, AATCC 35-per level  
Spray Test, AATCC 22  
Hydrostatic Pressure Test, AATCC 127

## Other Testing Available

We can customize testing to meet your specifications and needs

**Contact us:**  
**Phone: (800) 638-2627**  
**E-mail: [textileservices@ifi.org](mailto:textileservices@ifi.org)**