



URBN Inc. Textile Testing Requirements



Woven Fabrics

TEST DESCRIPTION	TEST METHOD	TYPE	REQUIREMENTS	URBN Test
Fiber Content	AATCC 20/20A	Fabric	Single Fiber: No Tolerance Blends +/- 3%	Required
Fabric Weight	ASTM D3776	Fabric	As claimed (+/- 5%) Report both oz/sq. yd & gsm	Required
Wearing Apparel (Flammability US)	16 CFR 1610	Fabric	Class 1 or exemption certification	Required
pH of Water-Extract	AATCC 81	Fabric	Whites (except Nylon and Protein): 5.0 — 6.5 Nylon and Protein Fibers: 4 – 7 Sulfur Dyed: 6.5 – 7.5 Others: 4.0 – 8.0	Required
Formaldehyde (coating, resin, or print only)	ISO 14184-1 / ISO 14184-2	Fabric	Less than 75 mg/kg For childrenswear 16 mg/kg	Required
Dimensional Stability (machine wash)	AATCC 135	Fabric	After 3 home laundries General -3% x -3%, no extension Corduroy, Velvet, Flannel -5% x -5%, no extension	Required
Dimensional Stability (hand wash)	AATCC LP2	Fabric	After 1 Hand wash General -2% x -2%, no extension	Required
Dimensional Stability (dry clean)	AATCC 158	Fabric	After 1 Dry Clean General -2% x -2%, no extension	Upon Request
General Appearance after Home Laundering / Dry Clean	Visual/ in-house method	Fabric	After 3 home laundries, Hand wash or 1 Dry Clean Result: Satisfactory; After washing or dry cleaning, no adhesive failure or bubbling, no breakage, shedding, deformation, obvious distortion or severe discoloration, no raveling of stitches	Upon Request
CF to Laundering or Dry Cleaning	AATCC 61/ AATCC 132	Fabric	Color Change: higher than 4.0 Staining: higher than 3.5 Self Staining: higher than 4.5 (for color block & print)	Required
CF to Non -Chlorine Bleach	AATCC TS-001 Soaking Test	Fabric	Minimum 4.0	Upon Request
CF to Crocking	AATCC 8	Fabric	Dry: General: higher than 4.0 Pigment /Raised: higher than 3.5 Wet: higher than 3.0	Upon Request
CF to Water	AATCC 107	Fabric	Color Change: higher than 4.0 Staining: higher than 3.5 Self Staining: higher than 4.5 (for color block & print)	Upon Request
CF to Light	AATCC 16-3	Fabric	Medium /Dark Cols: 4.0 @20AFU Light Col: 3.5 @20AFU Neon and silk: 3.0 @20AFU	Upon Request
CF to Chlorinated Pool Water	AATCC 162	Fabric	Swimwear Only Minimum: Grade 4	Required for swimwear
CF to Sea water	AATCC 106	Fabric	Swimwear Only Color Change: Minimum grade 4 Staining: Minimum grade 3 Self Staining: Minimum grade 4.5	Required for swimwear
Tear Strength	ASTM D1424	Fabric	In accordance to fabric weight: Less than 2.4oz/sq. yd (82gsm): 1.5lbs Min. 2.4-4.0 oz/sq. yd (82-136gsm): 2.0lbs Min 4.1-6.0 oz/sq. yd (136.1 -203gsm): 3.0lbs Min.	Required for cord and velveteen only
Seam Strength	ASTM D1683	Fabric	In accordance to fabric weight: Less than 4.0oz/sq. yd (135gsm): 15lbs Min. 4.1-6.0 oz/sq. yd (136.1 -203gsm): 20lbs Min. Above 6.0 oz /sq. yd (203.1gsm): 25lbs Min.	Upon Request
Tensile Strength	ASTM D5034	Fabric	In accordance to fabric weight: Less than 2.4oz/sq. yd (82gsm): 15lbs Min. 2.4-4.0 oz/sq. yd (82-136gsm): 25lbs Min 4.1-6.0 oz/sq. yd (136.1 -203gsm): 30lbs Min. Above 6.0 oz /sq. yd (203.1gsm): 40lbs Min.	Required
Stretch and Recovery (stretch fabric) *PFD exempt*	ASTM D3107	Fabric	Elastic Fiber Content: 1-5%: Measure growth after 60mins. Pass or fail based on growth. Growth maximum is 7% 5-10%: Measure growth after 30mins. Report growth & recovery. Pass or fail based on growth. Growth maximum is 5% +10%: Measure recovery after 30 seconds. Pass or fail based on recovery. Recovery: Minimum 85%	Required
Pile Retention (pile fabrics only)	ATSTM D4685: Face 300 cycles /back 100	Fabric	Minimum 4.0 face ,3.0 back	Required for cord & velveteen only
Abrasion Resistance	ASTM D4966	Fabric	10,000 cycles (no rupture, weight less than 7.5oz/yard) 15,000 cycles (no rupture, weight more than 7.5oz/yard)	Upon Request
Pilling Resistance	ASTM D4970	Fabric	Minimum 3.5 at 100 cycles	Required
Water Repellency /Spray Test (water repellency treatment only)	AATCC 22	Fabric	90/70/70 original/10 wash/20 wash	Upon Request
Water Resistance /Rain Test (for styles applying raincoat duty only)	AATCC 35	Fabric	Maximum less than 1 gram water at 2 mins under 600mm head pressure.	Upon Request
Flammability	16CFR 1615/1616 CCPSA	Fabric		Required for Kidswear
Phthalates	CPSC-CH-C1001-09.3	Fabric	Less than 0.1% per individual phthalate	Optional for Kidswear



URBN Inc. Textile Testing Requirements



Knit Fabrics + Sweater

TEST DESCRIPTION	TEST METHOD	TYPE	REQUIREMENTS	URBN Test
Fiber Content	AATCC 20/20A	Fabric	Single Fiber: No Tolerance Blends +/- 3%	Required
Fabric Weight	ASTM D3776	Fabric	As claimed (+/- 5%) Report both oz/sq. yd & gsm	Required
Wearing Apparel (Flammability US)	16 CFR 1610	Fabric	Class 1 or exemption certification	Required
pH of Water-Extract	AATCC 81	Fabric	Whites (except Nylon and Protein): 5.0 — 6.5 Nylon and Protein Fibers: 4 – 7 Sulfur Dyed: 6.5 – 7.5 Others: 4.0 – 8.0	Required
Formaldehyde (coating, resin, or print only)	ISO 14184-1 / ISO 14184-2	Fabric	Less than 75 mg/kg For childrenswear 16 mg/kg	Upon Request
Dimensional Stability (machine wash)	AATCC 135	Fabric	After 3 home laundries:- General & spandex fabrics; -5% x + 5% Fleece, Sherpa, French terry; -6% x -6% Rib, waffle, pique; -7% x -6% Jersey, Interlock, Pointelle; -6% x -6% Jersey in rayon under 150gsm; -8% x -8% Thermal; -8% x -8% Growth: +1% maximum Maximum differential shrinkage allowed 3%	Required
Dimensional Stability (hand wash)	AATCC LP2	Fabric	After 1 Hand wash General -3% x -3% Jersey in modal under 150gsm -6% x -6% No growth allowed Maximum differential shrinkage allowed 3%	Upon Request
Dimensional Stability (dry clean)	AATCC 158	Fabric	After 1 Dry Clean General -3% x -3% No growth allowed	Upon Request
General Appearance after Home Laundering / Dry Clean	Visual/ in-house method	Fabric	After 3 home laundries, Hand wash or 1 Dry Clean Result: Satisfactory; After washing or dry cleaning, no adhesive failure or bubbling, no breakage, shedding, deformation, obvious distortion or severe discoloration, no raveling of stitches	Upon Request
CF to Laundering or Dry Cleaning (Actual)	AATCC 61/ AATCC 132	Fabric	Color Change: higher than 4.0 Staining: higher than 3.5 Self Staining: higher than 4.5 (for color block & print)	Required
CF to Non -Chlorine Bleach	AATCC TS-001 Soaking Test	Fabric	Minimum 4.0	Upon Request
CF to Crocking	AATCC 8	Fabric	Dry: General: higher than 4.0 Pigment /Raised: higher than 3.5 Wet: higher than 3.0	Upon Request
CF to Water	AATCC 107	Fabric	Color Change: higher than 4.0 Staining: higher than 3.5 Self Staining: higher than 4.5 (for color block & print)	Upon Request
CF to Light	AATCC 16-3	Fabric	Medium /Dark Cols: 4.0 @20AFU Light Col: 3.5 @20AFU Neon and silk: 3.0 @20AFU	Upon Request
CF to Chlorinated Pool Water	AATCC 162	Fabric	Swimwear Only Minimum: Grade 4	Required for swimwear
CF to Sea water	AATCC 106	Fabric	Swimwear Only Color Change: Minimum grade 4 Staining: Minimum grade 3 Self Staining: Minimum grade 4.5	Required for swimwear
Bursting Strength	ASTM D6797	Fabric	250 N	Required
Stretch and Recovery (stretch fabric) *PFD exempt*	ASTM D2594	Fabric	Elastic Fiber Content: Less than 10%: Growth maximum 5% Measure time dependent growth and recovery using 60 mins. Report both growth and recovery. Pass or fail based on growth. Equal to or more than 10%: Recovery 85% minimum Measure instantaneous growth and recovery using 60 seconds. Report both growth and recovery. Pass or fail based on recovery	Required
Pilling Resistance - Random Tumble Pilling Method	ASTM D3512	Fabric	General: 3.5 Minimum Modal /Rayon/Polyester /Wool: 3 Minimum	Required
Pilling (Sweater Yarn Only)	IWS 152 /ISO 12945-1	Yarn	After 2 hours: Grade 3.5 minimum	Required
Flammability	16CFR 1615/1616 CCPSA	Fabric		Required for Kidswear
Phthalates	CPSC-CH-C1001-09.3	Fabric	Less than 0.1% per individual phthalate	Optional for Kidswear



URBN Inc. Textile Testing Requirements



Denim Fabric

TEST DESCRIPTION	TEST METHOD	TYPE	REQUIREMENTS	URBN Test
Fiber Content	AATCC 20/20A	Fabric	Single Fiber: No Tolerance Blends +/- 3%	Required
Fabric Weight	ASTM D3776	Fabric	As claimed (+/- 5%) Report both oz/sq. yd & gsm	Required
Wearing Apparel (Flammability US)	16 CFR 1610	Fabric	Class 1 or exemption certification	Required
pH of Water-Extract	AATCC 81	Fabric	Whites (except Nylon and Protein): 5.0 — 6.5 Nylon and Protein Fibers: 4 – 7 Sulfur Dyed: 6.5 – 7.5 Others: 4.0 – 8.0	Upon Request
Formaldehyde (coating, resin, or print only)	ISO 14184-1 / ISO 14184-2	Fabric	Less than 75 mg/kg 16 mg/kg for kidswear	<i>Required for Kidswear</i>
Dimensional Stability (machine wash)	AATCC 135	Fabric	After 3 home laundries General -3% x -3%, no extension Stretch with Spandex -4% x -4%, no extension	Upon Request
Dimensional Stability (dry clean)	AATCC 158	Fabric	After 1 Dry Clean General -2% x -2% No growth allowed	Upon Request
General Appearance after Home Laundering / Dry Clean	Visual/ in-house method	Fabric	After 3 home laundries, Hand wash or 1 Dry Clean Result: Satisfactory; After washing or dry cleaning, no adhesive failure or bubbling, no breakage, shedding, deformation, obvious distortion or severe discoloration, no raveling of stitches	Upon Request
CF to Non -Chlorine Bleach	AATCC TS-001 Soaking Test	Fabric	Minimum 4.0	Upon Request
CF to Water	AATCC 107	Fabric	Color Change: higher than 4.0 Staining: higher than 3.5 Self Staining: higher than 4.5 (for color block & print)	Upon Request
CF to Light	AATCC 16-3	Fabric	Medium /Dark Cols: 4.0 @20AFU Light Col: 3.5 @20AFU Neon and silk: 3.0 @20AFU	Upon Request
Tear Strength	ASTM D1424	Fabric	In accordance to fabric weight: Less than 6.0 oz/sq yd: 2.5 lb min 6.0 - 7.9 oz /sq yd: 4.0 lb min 8.0 - 9.9 oz /sq yd: 6.0 lb min Above 10.0 oz /sq yd: 7.0 lb min Lining and pocketing: 2.0 lb min	Upon Request
Seam Strength	ASTM D1683	Fabric	In accordance to fabric weight: Less than 4.0oz/sq. yd (135gsm): 15 lb min 4.1-6.0 oz/sq. yd (136.1 -203gsm): 20 lb min Above 6.0 oz /sq. yd (203.1gsm): 25 lb min	Upon Request
Tensile Strength	ASTM D5034	Fabric	In accordance to fabric weight: Less than 6.0 oz/sq yd: 20.0 lb min 6.0 - 7.9 oz /sq yd: 35.0 lb min 8.0 - 9.9 oz /sq yd: 55.0 lb min Above 10.0 oz /sq yd: 75.0 lb min Lining and pocketing: 10.0 lb min	Required
Stretch and Recovery (stretch fabric) *PFD exempt*	ASTM D3107	Fabric	Elastic Fiber Content: 1-5%: Measure growth after 60mins. Pass or fail based on growth. Growth maximum is 7% 5-10%: Measure growth after 30mins. Report growth & recovery. Pass or fail based on growth. Growth maximum is 5% +10%: Measure recovery after 30 seconds. Pass or fail based on recovery. Recovery: Minimum 85%	Required





URBN Inc. Textile Testing Requirements



Leather

TEST DESCRIPTION	TEST METHOD	TYPE	REQUIREMENTS	URBN Test
Leather Identification	AATCC 20/20A Microscopic	Fabric	Only top grain leather can be called "genuine"	Required
Material Weight	ASTM D3776	Fabric	As claimed (+/- 5%) Report both oz/sq. yd & gsm	Required
Wearing Apparel (Flammability US)	16 CFR 1610	Fabric	Class 1 or exemption certification	Upon Request
Formaldehyde (coating, resin, or print only)	ISO 17226-1/2	Fabric	Less than 75 mg/kg	Required
Dimensional Stability (dry clean)	Professional Dry Clean	Fabric	After 1 Dry Clean General -2% x -2% No growth allowed	Upon Request
General Appearance after Dry Clean	Visual Review after care/ In-house method	Fabric	1 Dry Clean Result: Satisfactory; no adhesive failure or bubbling, no breakage, deformation or severe discoloration, no raveling of stitches	Upon Request
CF to Crocking	AATCC 8 /116	Fabric	Dry: higher than 3.5 Wet: higher than 3.0	Upon Request
CF to Light	AATCC 16, Option 3	Fabric	Medium /Dark Cols: 4.0 @20AFU Light Col: 3.5 @20AFU	Upon Request
Tear Strength	ASTM D4704	Fabric	2.0lbs minimum	Upon Request
Tensile Strength	ASTM D2208	Fabric	30lbs minimum	Upon Request
Seam Strength	ASTM D1683	Fabric	20lbs minimum	Upon Request

<div>  <div>URBN Inc. Textile Testing Requirements</div>  </div>				
FPM Woven Fabrics				
TEST DESCRIPTION	TEST METHOD	TYPE	REQUIREMENTS	URBN Test
Fiber Content	AATCC 20/20A	Fabric	Single Fiber: No Tolerance Blends +/- 3%	Required
Fabric Weight	ASTM D3776	Fabric	As claimed (+/- 5%) Report both oz/sq. yd & gsm	Required
Wearing Apparel (Flammability US)	16 CFR 1610	Fabric	Class 1 or exemption certification	Required
pH of Water-Extract	GB/T 7573 AATCC 81 ISO 3071	Fabric	Whites (except Nylon and Protein): 5.0 — 6.5 Nylon and Protein Fibers: 4 – 7 Sulfur Dyed: 6.5 – 7.5 Others: 4.0 – 8.0	Required
Formaldehyde (coating, resin, or print only)	GB/T 2912.1, ISO 14184-1 / ISO 14184-2	Fabric	Less than 75 mg/kg	Required
Dimensional Stability (machine wash)	Washing as per GB/T 8630 using GB/T 8629 5A washing procedure AATCC 135	Fabric	After 3 home laundries General -3% x -3%, no extension Corduroy, Velvet, Flannel -5% x -5%, no extension	Required
Dimensional Stability (hand wash)	GB/T 8629, AATCC LP2	Fabric	After 1 Hand wash General -2% x -2%, no extension	Required
Dimensional Stability (dry clean)	FT/Z 80007.3, AATCC 158	Fabric	After 1 Dry Clean General -2% x -2%, no extension	Upon Request
General Appearance after Home Laundering / Dry Clean	Visual Review after care/ in-house method (Dimensional stability washed or drycleaned sample is examined for appearance per parameters in the requirements)	Fabric	After 3 home laundries, 1 Hand wash or 1 Dry Clean Result: Satisfactory; After washing or dry cleaning, no adhesive failure or bubbling, no breakage, shedding, deformation, obvious distortion or severe discoloration, no raveling of stitches	Required for neon colors
CF to Perspiration (color change/staining)	GB 18401- GB/T 3922 / AATCC 15	Fabric	3.0 - same as garment	Required
CF to Laundering or Dry Cleaning	GB/T3921 2008 (A1)/ GB/T 5711 AATCC 61/ AATCC 132	Fabric	Color Change: higher than 4.0 Staining: higher than 3.5 Self Staining: higher than 4.5 (for color block & print)	Required
CF to Non -Chlorine Bleach	AATCC TS-001 Soaking Test	Fabric	Minimum 4.0	Upon Request
CF to Crocking	GB/T 3920, AATCC 8	Fabric	Dry: General: higher than 4.0 Pigment /Raised: higher than 3.5 Wet: higher than 3.0	Required
CF to Water	GB/T 5713, AATCC 107	Fabric	Color Change: higher than 4.0 Staining: higher than 3.5 Self Staining: higher than 4.5 (for color block & print)	REQUIRED
CF to Light	GB/T8427, method 3 *Fade ISO Blue Wool No. 4 to Grade 4 AATCC 16.3 ISO B02	Fabric	Medium /Dark Colors: 4.0 minimum @20AFU Light Colors: 3.5 minimum @20AFU Neon and Silk: 3.0 minimum @20AFU	Upon Request
CF to Chlorinated Pool Water	AATCC 162	Fabric	Swimwear Only Minimum: Grade 4	Required for swimwear
CF to Sea water	AATCC 106	Fabric	Swimwear Only Color Change: Minimum grade 4 Staining: Minimum grade 3 Self Staining: Minimum grade 4.5	Required for swimwear
Tear Strength	GB/T3917.1, ASTM 1424	Fabric	In accordance to fabric weight: Less than 2.4oz/sq. yd (82gsm): 1.5lbs Min. 2.4-4.0 oz/sq. yd (82-136gsm): 2.0lbs Min 4.1-6.0 oz/sq. yd (136.1 -203gsm): 3.0lbs Min. Above 6.0 oz /sq. yd (203.1gsm): 4.0lbs Min.	REQUIRED fabric under 4.0oz
Seam Strength	GB/T 21294 section 9.2.2, ASTM D1683	Fabric	In accordance to fabric weight: Less than 4.0oz/sq. yd (135gsm): 15lbs Min. 4.1-6.0 oz/sq. yd (136.1 -203gsm): 20lbs Min. Above 6.0 oz /sq. yd (203.1gsm): 25lbs Min.	Upon Request
Tensile Strength	GB/T 3923.2, ASTM D5034	Fabric	In accordance to fabric weight: Less than 2.4oz/sq. yd (82gsm): 15lbs Min. 2.4-4.0 oz/sq. yd (82-136gsm): 25lbs Min 4.1-6.0 oz/sq. yd (136.1 -203gsm): 30lbs Min. Above 6.0 oz /sq. yd (203.1gsm): 40lbs Min.	Required
Stretch and Recovery (stretch fabric) *PFD exempt†	ASTM D3107	Fabric	Elastic Fiber Content: 1-5% Measure growth after 60mins. Pass or fail based on growth. Growth maximum is 7% 5-10% Measure growth after 30mins. Report growth & recovery. Pass or fail based on growth. Growth maximum is 5% +10% Measure recovery after 30 seconds. Pass or fail based on recovery. Recovery: Minimum 85%	Required
			Minimum 4.0 face ,3.0 back	Required for cord & velveteen only
Pile Retention (pile fabrics only)	ATSTM D4685: Face 300 cycles /back 100	Fabric		
Abrasion Resistance	ASTM D4966	Fabric	10,000 cycles (no rupture, weight less than 7.5oz/yd) 15,000 cycles (no rupture, weight more than 7.5oz/yd)	Upon Request
Pilling Resistance	GB/T4802.1 (Ref FZ/T 81007) sanding fabric, combing fabric, Method E; loose structure combing wool fabric, carding wool fabric, Method F; all other/undetermined fabrics, Method D ASTM D4970	Fabric	Minimum 3.5 at 100 cycles	Required
Total Flourine Screening	EN 14582:2016 with aqueous solution pretreatment	Fabric	100 ppm (by 2025) 50ppm (starting 2027)	Required for fabrics with DWR or WR coatings
Bisphenol A or Bisphenol C	Extraction: 1 g sample/20ml THF, sonification for 60 minutes at 60 degrees C, analysis with LC/MS AATCC 22	Fabric	1 ppm	Optional /On Request of brand
Water Repellency /Spray Test (water repellency treatment only)	AATCC 22	Fabric	90/70/70 original/10 wash/20 wash	Upon Request
Water Resistance /Rain Test (for styles applying raincoat duty only)	AATCC 35	Fabric	Maximum less than 1 gram water at 2 mins under 600mm head pressure.	Upon Request
UPF KNITS: Test Dry & Wet (as received & after conditioning) WOVENS: Test Dry only (as received & after conditioning)	UPF Rating 183/ASTM D6603 / UPF preparation ASTM D6544 20HL+50hrs light ***white fabric only	Fabric	20-24 : Good UV Protection 25 - 39 : Very Good UV Protection 40 - 50 : Excellent UV Protection	Upon Request
QUICK DRY	AATCC 201 (Drying Rate)	Fabric	≥ 1ml/hr. (initial) 3HL ≥ 1ml/hr.	Upon Request
Air Permeability (windproof and breathability)	ASTM D737 (Air Permeability)	Fabric	<3 CFM (max 2.9)	Upon Request
Water Resistant /Water proof	Follow submitted care JIS L1092 -A (hydrophobic) -B (hydrophilic)	Fabric	Initial as claimed (ie - 3K, 5K, 10K or 20K)	Upon Request
Breathable - Water proof fabrics	JIS L1099 -A1 (hydrophobic) -B1 (hydrophilic)	Fabric	Initial as claimed (ie - 3K, 5K, 10K or 20K g/m2/24hrs)	Upon Request
Wicking - moisture management	AATCC 197 (vertical wicking)	Fabric	MIN OF 8CM AFTER 30 MINS	Upon Request



URBN Inc. Textile Testing Requirements



FPM Knit Fabrics				
TEST DESCRIPTION	TEST METHOD	TYPE	REQUIREMENTS	URBN Test
Fiber Content	AATCC 20/20A	Fabric	Single Fiber: No Tolerance Blends +/- 3%	Required
Fabric Weight	ASTM D3776	Fabric	As claimed (+/- 5%) Report both oz/sq. yd & gsm	Required
Wearing Apparel (Flammability US)	16 CFR 1610	Fabric	Class 1 or exemption certification	Required
pH of Water-Extract	GB/T 7573 AATCC 81 ISO 3071	Fabric	Whites (except Nylon and Protein): 5.0 — 6.5 Nylon and Protein Fibers: 4 – 7 Sulfur Dyed: 6.5 – 7.5 Others: 4.0 – 8.0	Required
Formaldehyde (coating, resin, or print only)	GB/T 2912.1, ISO 14184-1 / ISO 14184-2	Fabric	Less than 75 mg/kg	Upon Request
Dimensional Stability (machine wash)	GB/T 8629 5A, AATCC 135	Fabric	After 3 home laundries:- General & spandex fabrics: -5% x + 5% Fleece, Sherpa, French terry: -6% x -6% Rib, waffle, pique: -7% x -6% Jersey, Interlock, Pointelle: -6% x -6% Jersey in rayon under 150gsm: -8% x -8% Thermal: -8% x -8% Growth: +1% maximum Maximum differential shrinkage allowed 3%	Required
Dimensional Stability (hand wash)	GB/T 8629 5A, AATCC LP2	Fabric	After 1 Hand wash General -3% x -3% Jersey in modal under 150gsm -6% x -6% No growth allowed Maximum differential shrinkage allowed 3%	Upon Request
Dimensional Stability (dry clean)	FZ/T8007.3, AATCC 158	Fabric	After 1 Dry Clean General -3% x -3% No growth allowed	Upon Request
General Appearance after Home Laundering / Dry Clean	Visual Review after care/ in-house method (Dimensional stability washed or drycleaned sample is examined for appearance per parameters in the requirements)	Fabric	After 3 home laundries, 1 Hand wash or 1 Dry Clean Result: Satisfactory; After washing or dry cleaning, no adhesive failure or bubbling, no breakage, shedding, deformation, obvious distortion or severe discoloration, no raveling of stitches	Required for NEON COLORS
CF to Perspiration (color change/staining)	GB 18401- GB/T 3922 / AATCC 15	Fabric	3.0 - same as garment	Required
CF to Laundering or Dry Cleaning	GB/T3921 2008 (A1)/ GB/T 5711 AATCC 61/132/158	Fabric	Color Change: higher than 4.0 Staining: higher than 3.5 Self Staining: higher than 4.5 (for color block & print)	Required
CF to Non -Chlorine Bleach	AATCC TS-001 Soaking Test	Fabric	Minimum 4.0	Upon Request
CF to Crocking	GB/T 3920, AATCC 8	Fabric	Dry: General: higher than 4.0 Pigment /Raised: higher than 3.5 Wet: higher than 3.0	Required
CF to Water	GB/T 5713, AATCC 107	Fabric	Color Change: higher than 4.0 Staining: higher than 3.5 Self Staining: higher than 4.5 (for color block & print)	REQUIRED
CF to Light	GB/T8427, method 3 *Fade ISO Blue Wool No. 4 to Grade 4 AATCC 16.3 ISO B02	Fabric	Medium /Dark Colors: 4.0 minimum @20AFU Light Colors: 3.5 minimum @20AFU Neon and Silk: 3.0 minimum @20AFU	Required
CF to Chlorinated Pool Water	AATCC 162	Fabric	Swimwear Only Minimum: Grade 4	Required for swimwear
CF to Sea water	AATCC 106	Fabric	Swimwear Only Color Change: Minimum grade 4 Staining: Minimum grade 3 Self Staining: Minimum grade 4.5	Required for swimwear
Bursting Strength	GB/T 19976 (ball diameter 38*0.02mm) ASTM D3786	Fabric	250 N	Required
Stretch and Recovery (stretch fabric) *PFD exempt*	ASTM D2594	Fabric	Elastic Fiber Content: Less than 10%: Growth maximum 5% Measure time dependent growth and recovery using 60 mins. Report both growth and recovery. Pass or fail based on growth. Equal to or more than 10%: Recovery 85% minimum Measure instantaneous growth and recovery using 60 seconds. Report both growth and recovery. Pass or fail based on recovery	Required
Pilling Resistance	GB/T4802.1 (Ref FZ/T 73020) Method E, GSB16-1523 ASTM D3512	Fabric	General: 3.5 Minimum Modal /Rayon/Polyester /Wool: 3 Minimum	Required
Pilling (Sweater Yarn Only)	IWS 152 /ISO 12945-1	Yarn	After 2 hours: Grade 3.5 minimum	Required
Bisphenol A (Poly/Spandex blend fabrics Only)	Extraction: 1 g sample/20ml THF, sonification for 60 minutes at 60 degrees C, analysis with LC/MS	Fabric	1 ppm	Required
Total Flourine Screening	EN 14582:2016 with aqueous solution pretreatment	Fabric	100 ppm (by 2025) 50ppm (starting 2027)	Required for fabrics with DWR or WR coatings
Water Repellency /Spray Test (water	AATCC 22	Fabric	90/70/70 original/10 wash/20 wash	Upon Request
Water Resistance /Rain Test (for styles	AATCC 35	Fabric	Maximum less than 1 gram water at 2 mins under	Upon Request
UPF	UPF Rating 183/ASTM D6603 / UPF	Fabric	20-24 : Good UV Protection	Upon Request
QUICK DRY	AATCC 201 (Drying Rate)	Fabric	≥ 1ml/hr. (initial) 3HL ≥ 1ml/hr.	Upon Request
Air Permeability (windproof and	ASTM D737 (Air Permeability)	Fabric	<3 CFM (max 2.9)	Upon Request
Water Resistant /Water proof	Follow submitted care JIS L1092 -A (hydrophobic)	Fabric	Initial as claimed (ie - 3K, 5K, 10K or 20K)	Upon Request
Breathable - Water proof fabrics	JIS L1099	Fabric	Initial as claimed (ie - 3K, 5K, 10K or 20K g/m2/24hrs)	Upon Request
Wicking - moisture management	AATCC 197 (vertical wicking)	Fabric	MIN OF 8CM AFTER 30 MINS	Upon Request