

# Intertek Standard of High-Performance Mark for General Activewear / Athleisure Wear (International Market) - Durable (Garment)

## Durable (Garment) (1)

		GARMENT - TOPS				
PRODUCT TYPE	TEST METHOD	T SHIRT (KNITTED)	SHIRTS AND BLOUSES (WOVEN)	SHIRTS AND BLOUSES (KNITTED)	SWEATERS AND MIDLAYERS	JACKETS AND COATS (WOVEN)
PHYSICAL PERFORMANCE (to be tested after prescribed number of washes unless specified in the test item)						
No of Washes / Drycleaning		60	60	60	30	15 / 60 (waterproof jackets)
Assessments after Washes / Drycleaning		1, 5, 15, 30 and 60	1, 5, 15, 30 and 60	1, 5, 15, 30 and 60	1, 5, 15 and 30	1, 5, 15, 30 and 60 (waterproof jackets)
Appearance After Wash / Drycleaning *	Visual Exam (Comprehensive) ISO 15487 ISO 6330 (washing) or ISO 3175 (dryclean) and Intertek Assessment Table	ISO Pilling grade replica : ≥3 No component failure (e.g. buttons or zippers) ISO Grey scale Colour change Grade : ≥4 No broken seams Intertek Assessment Table	ISO Pilling grade replica : ≥3 No component failure (e.g. buttons or zippers) ISO Grey scale Colour change Grade : ≥4 No broken seams Intertek Assessment Table	ISO Pilling grade replica : ≥3 No component failure (e.g. buttons or zippers) ISO Grey scale Colour change Grade : ≥4 No broken seams Intertek Assessment Table	ISO Pilling grade replica : ≥3 No component failure (e.g. buttons or zippers) ISO Grey scale Colour change Grade : ≥4 No broken seams Intertek Assessment Table	No coating degradation or delamination of any membranes ISO Pilling grade replica : ≥ 3-4 No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : ≥ 4 No broken seams Intertek Assessment Table
Dimensional Stability to Washing / Drycleaning *	ISO 6330 (washing) or ISO 3175 (dryclean) and ISO 5077	+/- 5%	+/- 3%	+/- 5%	+/- 5%	+/- 3%
Spirality *	ISO 16322-3 Procedure B	≤ 5%	≤ 5%	≤ 5%	≤ 5%	≤ 5%
Tensile strength	ISO 13934-1		<150 gsm: Warp ≥ 310N, Weft ≥200N 151 - 200gsm: Warp ≥380N, Weft ≥ 220N 201 -300 gsm: Warp ≥440N, Weft ≥270N 301 - 400gsm: Warp ≥490N, Weft 310N >400gsm: Warp ≥ 580N, Weft 380N			<150 gsm: Warp ≥ 310N, Weft ≥200N 151 - 200gsm: Warp ≥380N, Weft ≥ 220N 201 -300 gsm: Warp ≥440N, Weft ≥270N 301 - 400gsm: Warp ≥490N, Weft 310N >400gsm: Warp ≥ 580N, Weft 380N
Tear Strength	EN ISO 13937-1		<70gsm: ≥ 10N 70 - 120 gsm: ≥ 12N 121 - 200 gsm: ≥14N >200gsm: ≥ 18N			< 70 gsm: ≥ 10N 70-120 gsm: ≥ 12N 121-200 gsm: ≥14N > 200 gsm: ≥ 18N
Seam Strength	ISO 13935 -2 (modified)		12 Kg			12Kg
Seam Slippage	ISO 13936 - 2 (modified)		<220gsm: ≤ 2mm @ 60N ≥220gsm: ≤ 2mm @ 120N			< 220 gsm: ≤ 2mm @ 60N ≥ 220 gsm: ≤ 2mm @ 120N
Bursting Strength	ISO 13938-2 or ASTM D3786	≤ 180gsm: ≥ 310 kPa >180gsm: ≥ 400 kPa		≤ 180gsm: ≥ 310 kPa >180gsm: ≥ 400 kPa	≤ 180gsm: ≥ 310 kPa >180gsm: ≥ 400 kPa	





Pilling	ISO 12945-1 (Pilling box method) with assessment by ISO Pilling Grade replicas	After 1 wash & 15 washes Smooth surface : ≥ Grade 3-4 Products with raised Surface : ≥ Grade 3 10,800 cycles (180 min)	After 1 wash & 15 washes Smooth surface : ≥Grade 3-4 Products with raised Surface : ≥ Grade 3 10,800 cycles (180 min)	After 1 wash & 15 washes Smooth surface : ≥Grade 3-4 Products with raised surface ≥ Grade 3 10,800 cycles (180 min)	After 1 wash & 15 washes Smooth surface : ≥Grade 3-4 Products with raised Surface : ≥ Grade 3 10,800 cycles (180 min)	After 1 wash & 15 washes Smooth surface : ≥Grade 3-4 Products with raised Surface : ≥ Grade 3 10,800 cycles (180 min)
Martindale Abrasion Resistance	ISO 12947-2					≤ 245 gsm: No rupture after 12,500 cycles 245-339 gsm: No rupture after 25,000 cycles > 339 gsm: No rupture after 35,000 cycles
Stretch and Recovery	EN 14704-1 Method A	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 5 % after 30 mins	After 1 wash - Extension 5 % after 30 mins	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 5 % after 30 mins
		After 15 washes - 15% after 30 mins	After 15 washes - 10% after 30 mins	After 15 washes - 10% after 30 mins	After 15 washes - 15% after 30 mins	After 15 washes - 10% after 30 mins
Density/Weight	EN 12127 / ISO 3801	As received - Report only for bursting strength testing	As received - Report only for seam slippage, tear and tensile strength testing	As received - Report only for bursting strength testing	As received - Report only for bursting strength testing	As received - Report only for seam slippage, tear and tensile strength testing
Product waterproofness (if claimed) *	ISO 811					≥ 2600 mmH <sub>2</sub> O Includes assessment of seams (no leaking at any seam, curve, or cross point)
Fabric water repellence (if claimed) *	ISO 4920					≥ 3-4
<b>COLOUR PERFORMANCE (to be tested in the as received state)</b>						
Colour Fastness to Washing	ISO 105 -C06	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 3-4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Water	ISO 105 -E01	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 3-4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Perspiration	ISO 105 -E04 or AATCC 15	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 3-4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Crocking	ISO 105 -X12 or AATCC 8	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4	Stain Dry: 3-4 Wet: 4	Stain Dry: 4 Wet: 4
Colour Fastness to Light	ISO 105 -B02 or AATCC 16.3, Op3	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure

**\*Test items according to Product Environmental Footprint (PEF), Duration of service "Aspirational" level requirements**



## Durable (Garment) (2)

		GARMENT - TOPS		GARMENT - BOTTOMS	
PRODUCT TYPE	TEST METHOD	JACKETS AND COATS (KNITTED)	PANTS AND SHORTS (KNITTED)	PANTS AND SHORTS (WOVEN)	DRESSES, SKIRTS AND JUMPSUITS (KNITTED)
PHYSICAL PERFORMANCE (to be tested after prescribed number of washes unless specified in the test item)					
No of Washes / Drycleaning		15 / 60 (waterproof jackets)	60	60	60
Assessments after Washes / Drycleaning		1, 5 and 15 / 1, 5, 15, 30 and 60 (waterproof jackets)	1, 5 15, 30 and 60	1, 5 15, 30 and 60	1, 5 15, 30 and 60
Appearance After Wash / Drycleaning *	Visual Exam (Comprehensive) ISO 15487 ISO 6330 (washing) or ISO 3175 (dryclean) and Intertek Assessment Table	No coating degradation or delamination of any membranes ISO Pilling grade replica : $\geq 3-4$ No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : $\geq 4$ No broken seams Intertek Assessment Table	No coating degradation or delamination of any membranes ISO Pilling grade replica : $\geq 3-4$ No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : $\geq 4$ No broken seams Intertek Assessment Table	No coating degradation or delamination of any membranes ISO Pilling grade replica : $\geq 3-4$ No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : $\geq 4$ No broken seams Intertek Assessment Table	ISO Pilling grade replica : $\geq 3-4$ No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : $\geq 4$ No broken seams Intertek Assessment Table
Dimensional Stability to Washing / Drycleaning *	ISO 6330 (washing) or ISO 3175 (dryclean) and ISO 5077	+/- 5%	+/- 5%	+/-3%	+/- 5%
Spirality *	ISO 16322-3 Procedure B	$\leq 5\%$	$\leq 5\%$	$\leq 5\%$	$\leq 5\%$
Tensile strength	ISO 13934-1			<150 gsm: Warp $\geq 310N$ , Weft $\geq 200N$ 151 - 200gsm: Warp $\geq 380N$ , Weft $\geq 220N$ 201 -300 gsm: Warp $\geq 440N$ , Weft $\geq 270N$ 301 - 400gsm: Warp $\geq 490N$ , Weft 310N >400gsm: Warp $\geq 580N$ , Weft 380N	
Tear Strength	EN ISO 13937-1			< 70 gsm: $\geq 10N$ 70-120 gsm: $\geq 12N$ 121-200 gsm: $\geq 14N$ > 200 gsm: $\geq 18N$	
Seam Strength	ISO 13935 -2 (modified)			12Kg	
Seam Slippage	ISO 13936 - 2 (modified)			< 220 gsm: $\leq 2mm$ @ 60N $\geq 220$ gsm: $\leq 2mm$ @ 120N	
Bursting Strength	ISO 13938-2 or ASTM D3786	$\leq 180gsm$ : $\geq 310$ kPa >180gsm : $\geq 400$ kPa	$\leq 180gsm$ : $\geq 310$ kPa >180gsm : $\geq 400$ kPa		$\leq 180gsm$ : $\geq 310$ kPa >180gsm : $\geq 400$ kPa
Pilling		After 1 & 15 washes Smooth surface : $\geq$ Grade	After 1 & 15 washes Smooth surface : $\geq$ Grade	After 1 & 15 washes Smooth surface : $\geq$ Grade	After 1 & 15 washes Smooth surface $\geq$ Grade



	ISO 12945-1 (Pilling box method) with assessment by ISO Pilling Grade replicas	3-4 Products with raised Surface : ≥Grade 3 10,800 cycles (180 min)	3-4 Products with raised Surface : ≥ 3 10,800 cycles (180 min)	3-4 Products with raised Surface : ≥ 3 10,800 cycles (180 min)	3-4 Products with raised Surface : ≥ 3 10,800 cycles (180 min)
Martindale Abrasion Resistance	ISO 12947-2			≤ 245 gsm: No rupture after 12,500 cycles 245-339 gsm: No rupture after 25,000 cycles > 339 gsm: No rupture after 35,000 cycles	
Stretch and Recovery	EN 14704-1 Method A	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 10 % after 30 mins
		After 15 washes - 15% after 30 mins	After 15 washes - 15% after 30 mins	After 15 washes - 15% after 30 mins	After 15 washes - 15% after 30 mins
Density/Weight	EN 12127 / ISO 3801	Report only for bursting strength testing	Report only for bursting strength testing	Report only for seam slippage, tear and tensile strength testing	Report only for bursting strength testing
Product waterproofness (if claimed) *	ISO 811	≥ 2600 mmH <sub>2</sub> O Includes assessment of seams (no leaking at any seam, curve, or cross point)	≥ 2600 mmH <sub>2</sub> O Includes assessment of seams (no leaking at any seam, curve, or cross point)	≥ 2600 mmH <sub>2</sub> O Includes assessment of seams (no leaking at any seam, curve, or cross point)	
Fabric water repellence (if claimed) *	ISO 4920	≥ 3-4	≥ 3-4	≥ 3-4	
<b>COLOUR PERFORMANCE (to be tested in the as received state)</b>					
Colour Fastness to Washing	ISO 105 -C06	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Water	ISO 105 -E01	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Perspiration	ISO 105 -E04 or AATCC 15	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Crocking	ISO 105 -X12 or AATCC 8	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4
Colour Fastness to Light	ISO 105 -B02 or AATCC 16.3, Op3	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure

**\*Test items according to Product Environmental Footprint (PEF), Duration of service “Aspirational” level requirements**



## Durable (Garment) (3)

		GARMENT - BOTTOMS				
PRODUCT TYPE	TEST METHOD	DRESSES, SKIRTS AND JUMPSUITS (WOVEN)	LEGGINGS, STOCKINGS, TIGHTS AND SOCKS (KNITTED)	LEGGINGS, STOCKINGS, TIGHTS AND SOCKS (WOVEN)	UNDERWEAR (KNITTED)	UNDERWEAR (WOVEN)
PHYSICAL PERFORMANCE (to be tested after prescribed number of washes unless specified in the test item)						
No of Washes / Drycleaning Assessments after Washes / Drycleaning		60 1, 5, 15, 30 and 60	30 1, 5, 15 and 30	30 1, 5, 15 and 30	30 1, 5, 15 and 30	30 1, 5, 15 and 30
Appearance After Wash / Drycleaning *	Visual Exam (Comprehensive) ISO 15487 ISO 6330 (washing) or ISO 3175 (dryclean) and Intertek Assessment Table	ISO Pilling grade replica : $\geq 3-4$ No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : $\geq 4$ No broken seams Intertek Assessment Table	ISO Pilling grade replica : $\geq 3-4$ No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : $\geq 4$ No broken seams Intertek Assessment Table	ISO Pilling grade replica : $\geq 3-4$ No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : $\geq 4$ No broken seams Intertek Assessment Table	ISO Pilling grade replica : $\geq 3-4$ No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : $\geq 4$ No broken seams Intertek Assessment Table	ISO Pilling grade replica : $\geq 3-4$ No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : $\geq 4$ No broken seams Intertek Assessment Table
Dimensional Stability to Washing / Drycleaning *	ISO 6330 (washing) or ISO 3175 (dryclean) and ISO 5077	+/- 3%	+/- 5%	+/- 3%	+/- 5%	+/- 3%
Spirality *	ISO 16322-3 Procedure B	$\leq 5\%$	$\leq 5\%$	$\leq 5\%$	$\leq 5\%$	$\leq 5\%$
Tensile strength	ISO 13934-1	<150 gsm: Warp $\geq 310N$ , Weft $\geq 200N$ 151 - 200gsm: Warp $\geq 380N$ , Weft $\geq 220N$ 201 - 300 gsm: Warp $\geq 440N$ , Weft $\geq 270N$ 301 - 400gsm: Warp $\geq 490N$ , Weft 310N >400gsm: Warp $\geq 580N$ , Weft 380N		<150 gsm: Warp $\geq 310N$ , Weft $\geq 200N$ 151 - 200gsm: Warp $\geq 380N$ , Weft $\geq 220N$ 201 - 300 gsm: Warp $\geq 440N$ , Weft $\geq 270N$ 301 - 400gsm: Warp $\geq 490N$ , Weft 310N >400gsm: Warp $\geq 580N$ , Weft 380N		<150 gsm: Warp $\geq 310N$ , Weft $\geq 200N$ 151 - 200gsm: Warp $\geq 380N$ , Weft $\geq 220N$ 201 - 300 gsm: Warp $\geq 440N$ , Weft $\geq 270N$ 301 - 400gsm: Warp $\geq 490N$ , Weft 310N >400gsm: Warp $\geq 580N$ , Weft 380N
Tear Strength	EN ISO 13937-1	< 70 gsm: $\geq 10N$ 70-120 gsm: $\geq 12N$ 121-200 gsm: $\geq 14N$ > 200 gsm: $\geq 18N$		< 70 gsm: $\geq 10N$ 70-120 gsm: $\geq 12N$ 121-200 gsm: $\geq 14N$ > 200 gsm: $\geq 18N$		< 70 gsm: $\geq 10N$ 70-120 gsm: $\geq 12N$ 121-200 gsm: $\geq 14N$ > 200 gsm: $\geq 18N$
Seam Strength	ISO 13935 -2 (modified)	12Kg		12Kg		12Kg
Seam Slippage	ISO 13936 - 2 (modified)	< 220 gsm: $\leq 2mm$ @ 60N $\geq 220$ gsm: $\leq 2mm$ @ 120N		< 220 gsm: $\leq 2mm$ @ 60N $\geq 220$ gsm: $\leq 2mm$ @ 120N		< 220 gsm: $\leq 2mm$ @ 60N $\geq 220$ gsm: $\leq 2mm$ @ 120N
Bursting Strength	ISO 13938-2 or ASTM D3786		$\leq 180gsm$ : $\geq 310$ kPa >180gsm : $\geq 400$ kPa		$\leq 180gsm$ : $\geq 310$ kPa >180gsm : $\geq 400$ kPa	



Pilling	ISO 12945-1 (Pilling box method) with assessment by ISO Pilling Grade replicas	After 1 & 15 washes Smooth surface : ≥Grade 3-4 Products with raised surface: ≥Grade 3 10,800 cycles (180 min)	After 1 & 15 washes Smooth surface : ≥Grade 3-4 Products with raised Surface : ≥Grade 3 10,800 cycles (180 min)	After 1 & 15 washes Smooth surface : ≥Grade 3-4 Products with raised Surface : ≥Grade 3 10,800 cycles (180 min)	After 1 & 15 washes Smooth surface : ≥Grade 3-4 Products with raised Surface : ≥Grade 3 10,800 cycles (180 min)	After 1 & 15 washes Smooth surface : ≥Grade 3-4 Products with raised Surface : ≥Grade 3 10,800 cycles (180 min)
Martindale Abrasion Resistance	ISO 12947-2	≤ 245 gsm: No rupture after 12,500 cycles 245-339 gsm: No rupture after 25,000 cycles > 339 gsm: No rupture after 35,000 cycles		≤ 245 gsm: No rupture after 12,500 cycles 245-339 gsm: No rupture after 25,000 cycles > 339 gsm: No rupture after 35,000 cycles		≤ 245 gsm: No rupture after 12,500 cycles 245-339 gsm: No rupture after 25,000 cycles > 339 gsm: No rupture after 35,000 cycles
Stretch and Recovery	EN 14704-1 Method A	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 10 % after 30 mins
		After 15 washes - 15% after 30 mins	After 15 washes - 15% after 30 mins	After 15 washes - 15% after 30 mins	After 15 washes - 15% after 30 mins	After 15 washes - 15% after 30 mins
Density/Weight	EN 12127 / ISO 3801	Report only for seam slippage, tear and tensile strength testing	Report only for bursting strength testing	Report only for seam slippage, tear and tensile strength testing	Report only for bursting strength testing	Report only for seam slippage, tear and tensile strength testing
Product waterproofness (if claimed) *	ISO 811					
Fabric water repellence (if claimed) *	ISO 4920					
<b>COLOUR PERFORMANCE (to be tested in the as received state)</b>						
Colour Fastness to Washing	ISO 105 -C06	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Water	ISO 105 -E01	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Perspiration	ISO 105 -E04 or AATCC 15	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Crocking	ISO 105 -X12 or AATCC 8	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4
Colour Fastness to Light	ISO 105 -B02 or AATCC 16.3, Op3	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure		

**\*Test items according to Product Environmental Footprint (PEF), Duration of service "Aspirational" level requirements**



## Durable (Garment) (4)

PRODUCT TYPE	TEST METHOD	GARMENT – SWIMWEAR		APPAREL ACCESSORIES	
		SWIMWEAR (KNITTED)	SWIMWEAR (WOVEN)	APPAREL ACCESSORIES (KNITTED)	APPAREL ACCESSORIES (WOVEN)
PHYSICAL PERFORMANCE (to be tested after prescribed number of washes unless specified in the test item)					
No of Washes / Drycleaning Assessments after Washes / Drycleaning		30	30	60	60
		1, 5, 15 and 30	1, 5, 15 and 30	1, 5, 15, 30 and 60	1, 5, 15, 30 and 60
Appearance After Wash / Drycleaning *	Visual Exam (Comprehensive) ISO 15487 ISO 6330 (washing) or ISO 3175 (dryclean) and Intertek Assessment Table	ISO Pilling grade replica : ≥ 3-4 No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : ≥ 4 No broken seams Intertek Assessment Table	ISO Pilling grade replica : ≥ 3-4 No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : ≥ 4 No broken seams Intertek Assessment Table	ISO Pilling grade replica : ≥ 3-4 No coating degradation or delamination of any membranes No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : ≥ 4 No broken seams Intertek Assessment Table	ISO Pilling grade replica : ≥ 3-4 No coating degradation or delamination of any membranes No component failure (e.g. buttons or zippers) ISO Greyscale Colour change Grade : ≥ 4 No broken seams Intertek Assessment Table
Dimensional Stability to Washing / Drycleaning *	ISO 6330 (washing) or ISO 3175 (dryclean) and ISO 5077	+/- 5%	+/- 3%	+/- 5%	+/- 3%
Spirality *	ISO 16322-3 Procedure B	≤ 5%	≤ 5%	≤ 5%	≤ 5%
Tensile strength	ISO 13934-1		<150 gsm: Warp ≥ 310N, Weft ≥ 200N 151 - 200gsm: Warp ≥ 380N, Weft ≥ 220N 201 - 300 gsm: Warp ≥ 440N, Weft ≥ 270N 301 - 400gsm: Warp ≥ 490N, Weft 310N >400gsm: Warp ≥ 580N, Weft 380N		<150 gsm: Warp ≥ 310N, Weft ≥ 200N 151 - 200gsm: Warp ≥ 380N, Weft ≥ 220N 201 - 300 gsm: Warp ≥ 440N, Weft ≥ 270N 301 - 400gsm: Warp ≥ 490N, Weft 310N >400gsm: Warp ≥ 580N, Weft 380N
Tear Strength	EN ISO 13937-1		< 70 gsm: ≥ 10N 70-120 gsm: ≥ 12N 121-200 gsm: ≥ 14N > 200 gsm: ≥ 18N		< 70 gsm: ≥ 10N 70-120 gsm: ≥ 12N 121-200 gsm: ≥ 14N > 200 gsm: ≥ 18N
Seam Strength	ISO 13935 -2 (modified)		12Kg		12Kg
Seam Slippage	ISO 13936 - 2 (modified)		< 220 gsm: ≤ 2mm @ 60N ≥ 220 gsm : ≤ 2mm @ 120N		< 220 gsm: ≤ 2mm @ 60N ≥ 220 gsm: ≤ 2mm @ 120N
Bursting Strength	ISO 13938-2 or ASTM D3786	≤ 180gsm : ≥ 310 kPa >180gsm : ≥ 400 kPa		≤ 180gsm : ≥ 310 kPa >180gsm : ≥ 400 kPa	
Pilling	ISO 12945-1 (Pilling box method) with assessment by ISO Pilling Grade replicas	After 1 & 15 washes Smooth surface : ≥ Grade 3-4 Products with raised surface ≥ Grade 3	After 1 & 15 washes Smooth surface : ≥ Grade 3-4 Products with raised surface ≥ Grade 3	After 1 & 15 washes Smooth surface : ≥ Grade 3-4 Products with raised surface ≥ Grade 3	After 1 & 15 washes Smooth surface : ≥ Grade 3-4 Products with raised surface ≥ Grade 3



		10,800 cycles (180 min)	10,800 cycles (180 min)	10,800 cycles (180 min)	10,800 cycles (180 min)
Martindale Abrasion Resistance	ISO 12947-2				
Stretch and Recovery	EN 14704-1 Method A	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 10 % after 30 mins	After 1 wash - Extension 10 % after 30 mins
		After 15 washes - 15% after 30 mins	After 15 washes - 15% after 30 mins	After 15 washes - 15% after 30 mins	After 15 washes - 15% after 30 mins
Density/Weight	EN 12127 / ISO 3801	Report only for bursting strength testing	Report only for seam slippage, tear and tensile strength testing	Report only for bursting strength testing	Report only for seam slippage, tear and tensile strength testing
Product waterproofness (if claimed) *	ISO 811			≥ 2600 mmH <sub>2</sub> O Includes assessment of seams (no leaking at any seam, curve, or cross point)	≥ 2600 mmH <sub>2</sub> O Includes assessment of seams (no leaking at any seam, curve, or cross point)
Fabric water repellence (if claimed) *	ISO 4920			≥ 3-4	≥ 3-4
<b>COLOUR PERFORMANCE (to be tested in the as received state)</b>					
Colour Fastness to Washing	ISO 105 -C06	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Water	ISO 105 -E01	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Perspiration	ISO 105 -E04 or AATCC 15	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5
Colour Fastness to Crocking	ISO 105 -X12 or AATCC 8	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4	Stain Dry: 4 Wet: 4
Colour Fastness to Light	ISO 105 -B02 or AATCC 16.3, Op3	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure	Blue Reference : ≥Grade 4 144 hours of light exposure
Colour Fastness to Chlorinated Water	ISO 105-E03, 50 mg/L	Change: 3-4	Change: 3-4		
Colour Fastness to Salt Water	ISO 105-E02	Change: 4 Stain: 4 Cross Stain: 4-5	Change: 4 Stain: 4 Cross Stain: 4-5		

\*Test items according to Product Environmental Footprint (PEF), Duration of service "Aspirational" level requirements





ntentionally added functional property claims according to Product Environmental Footprint (PEF), Duration of service “Aspirational” level requirements

Performance Claim	Test Standard	As received and after 60 washes (unless specified in the test item)
Smoothness	ISO 5077 & 6330 (washing) or ISO 3175-2 & 3175-1 (dryclean) according to care label	Grade $\geq$ 3 - 4 after 15x cleaning cycles
Cold (thermal resistance)	ISO11092 RCT	Change claimed value (K.m <sup>2</sup> /W): <10%
Water repellency	Bundesmann ISO 9865 OR	Rating below 2.5 not included at 10 min
	ISO 4920	$\geq$ Grade 4 (laundered specimen)
Soil or stain Release	AATCC 130, Washing Procedure selection to match care label	$\geq$ Grade 4 (laundered specimen)
Wrinkle resistance	ISO 9867	$\geq$ Grade 4 (laundered specimen)
Wicking	AATCC 197 (Option B, 30 minutes)	Measure performance “as received” (initial value). After wash, must achieve the HIGHER of 80% of initial value or 150 mm.
Odor management	ISO 20743, Absorption Method	1-log reduction (90% reduction) in bacteria after 24-hour contact time compared to an untreated, unlaundered sample.
Breathability (post- laundering)	*JIS L1099 ** ISO 11092	U-Urban wear, A-Active wear, M-Mountaineering wear Option 1* B1 & B2: U: $\geq$ 8000 & 5000, A: $\geq$ 12000 & 8000, M: $\geq$ 20000 & 10000. Option 2**, Ret: U: 13-20, A: 6-13, M: $\leq$ 6
Stretch and recovery	EN 14704-1	$\geq$ 85% recovery after 30 min - Fabrics containing <5% elastane $\geq$ 90% recovery after 30 min - Fabrics containing $\geq$ 5% elastane
Others	Relevant ISO standard	Measure performance “as received” (initial value). After wash, must keep 80% of initial value.