

*The below Table is a summary sheet of QTEC Quality Standards. For further details, please contact your nearest QTEC office.

*Each color fastness test shall cover all colors except white and natural white.

*Adjacent fabric: Cotton and Silk (If necessary, Cotton and Nylon). However, use multifiber adjacent fabric (№1) for Dry cleaning, and use Polyester and Cotton for Sublimation.

Test Item		End Use	Jackets, Coats	Skirts, Pants	Sweater	Cut & Sew	Woven Shirts	Underwear	Nightwear	Swimsuit	Towels	Socks	Gloves	Cap	Scarf	Bedding	Floor coverings	Remarks			
Color Fastness Grade, (Min.)	Light	JIS L 0842 Exposure method 3	Color change	4(3)	4(3)	3	3	3	3	3	3	3	3	3	3	3	3	3	• () : Applied for natural leather, pale color and casual products. • Yellowing due to FWA, or white area is excluded from judgment.		
	Washing	JIS L 0844 A-1, A-2	Color change	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	• Applied for washable products. • () : For products of dark and pale color combination. • Denim: Color change 3-4 or more. Staining 2-3 or more. • Method A-1 for wool, silk, acetate or natural leather.		
			Staining	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	• Wool or Silk: Staining 2-3 or more. • () : For products of dark and pale color combination. • Natural leather: Color change 3 or more. Staining 2 or more.		
	Perspiration	JIS L 0848	Color change	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	• Wool or Silk: Staining 2-3 or more. • () : For products of dark and pale color combination. • Natural leather: Color change 3 or more. Staining 2 or more.		
			Staining	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	3(3-4)	• Wool or Silk: Staining 2-3 or more. • () : For products of dark and pale color combination. • Natural leather: Color change 3 or more. Staining 2 or more.		
	Rubbing	JIS L 0849 Type II	Dry	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	3-4(3)	• () : Applied for denim, velveteen, corduroy, raising, special print, flocking and natural leather. • In cellulose fiber (dark color) : Staining (wet) 2 or more.	
			Wet	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	2-3(1-2)	• () : Applied for denim, velveteen, corduroy, raising, special print, flocking and natural leather. • In cellulose fiber (dark color) : Staining (wet) 2 or more.	
	Perspiration & Light	JIS L 0888 Method B	Color change	3(3-4)	3(3-4)	3	3(3-4)	3(3-4)	3	3	4	3	3	3	3-4	3	3	3	3	• () : For cellulose fiber (jackets, pants, shirts, blouses for summer) and sports clothing.	
	Dry cleaning	JIS L 0860 A-1, B-1	Color change	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	• Applied for dry cleanable products. • () : For products of dark and pale color combination. • The test method (A-1 or B-1) is according to the care label.	
			Staining	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	3(4)	• Applied for cellulose fiber (excluding swimsuit). • Method B for swimsuit.	
Chlorinated Water	JIS L 0884 Method A,B	Color change	3-4	3-4	3-4	3-4	3-4	3-4	3-4	4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	3-4	• Applied for cellulose fiber (excluding swimsuit). • Method B for swimsuit.		
Bleeding	DAIMARU Method	Staining	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	4-5	• Applied for products of dark and pale color combination.		
Sublimation	JIS L 0854	Color change	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	• Applied for polyester.		
		Staining	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	• Applied for polyester.		
Dimensional Change (% , allowable)	Washing	According to care label. Tumble dry	Woven	±3	±3	-	-	±4	±5	±4	±4	±4	±4	±3	±4	±4	±4	±4	• Applied for washable products. • For weft knit and stretch products with no problems for wearing (e.g. rib, crepe, etc.), width direction shrinkage is excluded from judgment.		
			Weft knitting	-5~0	-5~0	-8~0	-8~0	-	-8~0	-8~0	-8~0	-8~0	-8~0	-8~0	-8~0	-8~0	-8~0	-8~0		-8~0	
			Others	-3~0	-3~0	-6~0	-6~0	-	-6~0	-6~0	-6~0	-6~0	-6~0	-6~0	-6~0	-6~0	-6~0	-6~0		-6~0	
		According to care label. Line dry Flat dry	Woven	±3	±3	-	-	±4	±5	±4	±4	±4	±4	±4	±3	±4	±4	±4		±4	• Applied for dry cleanable products (and not washable). • () : Applied for men's clothing (suits) .
			Weft knitting	-5~+2	-5~+2	-6~+5	-6~+5	-	-8~+5	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5		-6~+5	
			Others	-3~+2	-3~+2	-	-	-	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5	-6~+5		-6~+5	
	Dry cleaning	Woven	±3	±3	-	-	±4	±5	±4	±4	±4	±4	±4	±3	±4	±4	±4	±4	• Applied for dry cleanable products (and not washable). • () : Applied for men's clothing (suits) .		
		Weft knit	±3 (±2)	±3	Length-5~+3 Width -6~+5	Length-5~+3 Width -6~+5	-	±3	Length-5~+3 Width -6~+5	Length-5~+3 Width -6~+5	±3	±3	±3	±3	±3	±3	±3	±3			
		Others	±3	±3	-	-	-	±3	±3	±3	±3	±3	±3	±3	±3	±3	±3	±3			
	Pressing	JIS L 1096 H-2	Woven	±2	±2	-	-	±2	±2	±2	±2	±2	±2	±2	±2	±2	±2	±2		±2	• Applied for dry cleanable products (and not washable). • () : Applied for men's clothing (suits) .
Knit			±3	±3	±3	±3	-	±3	±3	±3	±3	±3	±3	±3	±3	±3	±3	±3			
Tearing Strength	(N, Min)	JIS L 1096 Method D	10(7)	10(7)	-	-	7	7	7	10(7)	7	-	7	10(7)	7	10(7)	10(7)	10(7)		• Applied for woven, • () : For thin fabrics. • Sportswear: 15N or more. Slacks: 13N or more. Lining :5N or more.	
Bursting Strength	(kPa, Min)	JIS L 1096 Method A	500 (400)	500 (400)	400 (300)	400 (300)	-	300	400 (300)	400 (300)	300	400	300	400 (300)	300	400 (300)	400 (300)	400 (300)	• Applied for knit, • () : For thin fabrics. • Products using elastic threads (ex. polyurethane) are excluded from judgment (excluding swimsuit). • Lace fabrics are excluded from judgment.		
Abrasion Resistance	(Times, Min)	JIS L 1096 Uniform Type	-	-	-	-	-	-	-	-	-	500(1000)	-	-	-	-	-	-	• () : For Business socks.		
Seam Slippage	(mm, Max)	JIS L 1096 Method B Thin 49.0N Thick117.7N	3(5)	3(5)	-	-	3(5)	3(5)	3(5)	3(5)	-	-	-	3(5)	-	3(5)	-	-	• Applied for woven, • () : For thick fabrics.		
Pilling	(Grade, Min)	JIS L 1076 Method A	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	3(2)	• () : For synthetic blend fabrics and animal fiber blend fabrics. • Raised fabrics are excluded from judgment.		
		JIS L 1076 Method C	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-	-	-		
Pile Retention	(Grade, Min or mN, Min)	JIS L 1075 Method A-based and Method B	3-4 (2)	3-4 (2)	(2)	(2)	3-4	3-4 (2)	3-4(2) 【500mN】	-	【500mN】	-	-	3-4 (2)	3-4 (2)	3-4(2) 【500mN】	3-4(2) 【500mN】	3-4(2) 【500mN】	• Applied for velveteen and corduroy, • () : For knitted velour. • 【 】 : For towel fabrics (loop pile) [JIS L 1075 Method B]		
Fiber adhesion	(Grade, Min)	QTEC Method	3(2.5)	3(2.5)	3(2.5)	3(2.5)	3(2.5)	3(2.5)	3(2.5)	-	3(2.5)	3(2.5)	3(2.5)	3(2.5)	3(2.5)	3(2.5)	3(2.5)	3(2.5)	• Applied for raised fabrics, • () : For animal fiber blend fabrics.		
Formaldehyde	(Max)	Ordinance no. 34 of the Ministry of Health and Welfare	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	0.05 (75µg/g)	• Applied for items regulated by law. • () : For general products other than those for infant use.		