

203-37

Washed Garments (Knits & Woven) Test Protocol

Garment Washed, Denim, Wet Processed, Resin, Chemically treated, Cured, Over Dyed, Enzyme/ Stone/ Sand Blasted etc.

PERFORMANCE	TEST METHOD	REQUIREMENT		
Label Verification				
Label Review	Care Label 16 CFR 423 Textile Fiber Products Identification Act 16 CFR 303 Wool Product Labeling Act-16 CFR 300 Fur Products Labeling Act – 16 CFR 301 Fur Product Identification Act – 15 U.S.C.69	Fiber Content, Care, Country of Origin, Manufacturers Registration Number, Wool Products Registration Number must meet Federal Standards If label is not sewn to garment, artwork of the proposed care/content label must be provided.		
Tracking Label: Children's product: ALL ages	Consumer Product Safety Improvement Act of 2008 (CPSIA) SEC. 103	Refer to Kohl's Tracking Label Section in the Labeling Guideline Policy. Following information must be provided: Retailer's Name (Kohl's) Style Number/Name Factory Number Date (Month/Year)		
Adult Tracking Label: **If space limitations exist, contact Kohl's Quality Assurance & Product Integrity teams to discuss minimum required information (MR.QA.PI@kohls.com).**	Kohl's Requirement	Refer to Kohl's Tracking Label Section in the Labeling Guideline Policy. Following information must be provided: PASS/FAIL: Kohl's Assigned Factory Number Manufacture Date (Month/Year) UPC #		
Fiber Content [For filled garments, garments with lining, faux fur trim, etc., if previously not tested]	AATCC 20/20A Textile Fiber Products Identification Act 16 CFR 303 Wool Product Labeling Act-16 CFR 300 Fur Products Labeling Act – 16 CFR 301 Fur Product Identification Act – 15 U.S.C.69	One Fiber Only: No Tolerance Two or More Fibers: +/- 3% max deviation from contracted fiber content Functional Fibers i.e. Spandex: +/- 2% max deviation from contracted fiber content		
Performance Claims Protocol (401)	Refer to Protocol 401	All samples shall be reviewed against the requirements of the Performance Claims Protocol to determine if additional testing or labeling is required		
Softlines Regulatory Supplemental Protocol	Refer to Protocol 501	All samples shall be reviewed against the requirements of the Softlines Regulatory Supplemental Protocol to determine if additional testing or labeling is required.		
Construction Quality				
Monofilament Thread (applicable to children only)	Visual	No monofilament thread allowed		
Drawstrings and/or Ties (Children's of ALL ages)	ASTM F 1816-97	Must Comply with Kohl's Safety Requirement where specified		
Fragile Trims	Visual	Sizes 0-5T: Must comply with Kohl's Safety Requirement Sizes over 5T & Adult: Report Actual Findings		
Zipper Guard	Visual	Present – Refer to Product Safety Policy		
Hook & Loop Fasteners	Visual	Must have rounded corners – Refer to Product Safety Policy		
Sharp Points & Sharp Edges	CPS 16 CFR 1500.48 - 49	No sharp points or sharp edges – Refer to Product Safety Policy		
Physical Properties				
Yarn Size	ASTM D 1059	Tolerance +/- 5 % Max		
Count	Knit: ASTM D 3887, AATCC/ASTM TS-002 Woven: ASTM D 3775	Tolerance +/- 5 % Max		
Fabric Weight	ASTM D 3776 Modified	Deviation from Contracted weight (gsm / oz per sq yd):+/- 5% maximum		
Flammability	16 CFR 1610	Class 1 Test non-exempt fabrics must be tested in every color		
Dimensional Change to Home Laundering, Dry Cleaning or Hand Wash (Differential shrinkage between different fabrications should not exceed 2 %)	AATCC 150 , AATCC 158 (3 cycles) AATCC LP2 (Length X Width) Tide * Powder Detergent (Maximum)	Wovens	Tier 1	Tier 2
		Shrinkage %	3x3	2x2
		Growth %	1x1	1x1
		Knits		
		FIBER CONTENT	FABRIC TYPE	SHRINK
		100% COTTON	Jersey	6x6
			Interlock, 1x1 rib, 2x2 rib	6x6
			Thermal (waffle)	6x6
		CVC & Cotton Rich Stretch	Jersey	6x6
			Interlock, 1x1 rib, 2x2 rib	6x6
			Fleece, French Terry	6x6
			Thermal (waffle)	6x6
		100% POLY	Jersey, Interlock	5x5
			1x1 rib, 2x2 rib, Thermal	6x6
			Fleece, French Terry	5x5
POLY/COTTON	Jersey, Interlock	5x5		
	1x1 rib, 2x2 rib, Thermal	6x6		
	Fleece, French Terry	5x5		
100% Rayon, Rayon/Spandex, Poly/Rayon, Poly/Rayon/Spandex	Jersey	6x6		
	1x1 rib, 2x2 rib	6x6		
Dry Cleaning (3 cycles)	All Fabrics	2 x 2		
Appearance Retention	AATCC/ASTM TS-008 Modified Tide * Powder Detergent	Allow 1% Growth Only Must meet all applicable Kohl's Appearance Evaluation Requirements		
Tensile Strength (Wovens)	ASTM D 5034 lbs. (min)		Tier 1	Tier 2
		< /= 3.0 oz/sq yd	20 x 15	20x20
		3.1 to 6 oz sq /yd	25x20	30x25
		6.1 to 9 oz/sq yd	40 x35	45 x 40

		>9oz/ sq yd	60x40	75 x 50
Tear Strength (Wovens)	ASTM D 1424 lbs. (min)	< /= 3.0 oz/sq yd	Tier 1 1.5x1.0	Tier 2 2.0 x 1.5
		3.1 to 6 oz sq /yd	2.0x1.5	2.5x2.0
		6.1 to 9 oz/sq yd	2.5x2.0	3.0x2.0
		>9oz/ sq yd	3.5 x 3.0	3.5 x 3.0
Seam Strength /slippage (Wovens)	ASTM D 1683 (Functional Seams) lbs. (min) Record seam slippage at 1/4" opening of seam	< /= 3.0 oz/sq yd	Tier 1 20/15	Tier 2 20/15
		3.1 to 6 oz sq /yd	25/15	30/20
		6.1 to 9 oz/sq yd	25/20	35/20
		9.1 to 10 oz / sq yd	40/20	50/20
		10.1 to 12 oz/ sq yd	50/20	50/20
		Functional Pockets- Seam Strength	15	15
		Non-Functional Pockets- Seam Strength	Data	Data
Bursting Strength (Knits)	ASTM D 3786 lbs/sq.in (min)	> 12 oz/ sq yd	Tier 1 60/20	Tier 2 60/20
		< /= 4 oz/ sq yd	30	40
		> 4 oz/ sq yd	40	50
		Lace, mesh etc	15	15
Seam Strength (Knits)	ASTM D 3786 lbs/sq.in (min)	< /= 4.0 oz / sq yd	Tier 1 30	Tier 2 40
		> 4.0 oz/ sq yd	40	45
		Lace, mesh etc	15	15
Attachment Strength* A) Applies to all Rings/Sliders B) Applies to Buttons, Snaps, Small Parts, Belt Loops, Zipper Tab, etc. C) Applies to Hanger Loops D) Over 5T-Adult: Fragile Trims: Beads, Rhinestones, etc	16 CFR 1500.51-53 Pt. F (Saf Q)	A) REQUIREMENT (for all garments): No detachment at 25 lbs. DATA ONLY: Report the point at which the trim fails, or if there is no detachment at 50 lbs.		
		B) REQUIREMENT: Over 5T - Adult: No detachment at 17 lbs. for 10 seconds Exceptions: Buttons: 20lbs DATA ONLY: Report the point at which the trim fails, or if there is no detachment at 50 lbs.		
		C) REQUIREMENT: No detachment at 5 lbs. DATA ONLY: Report the point at which the trim fails, or if there is no detachment at 50 lbs.		
		D) REQUIREMENT: 5 lbs. for 10 seconds minimum		
Analytical Test				
Formaldehyde	Kohl's TM-5 (only for 4 years and up)	Negative, If Spot Test is Positive, proceed with step 2		
	JIS L 1041:2000 – Sec. 5.3.1 (2) Method B, JIS Water Extraction Method	Children over 5T & Adults = 75 ppm max. Children's 0-5T = 20 ppm max.		
Attachment Strength 0-5T* Applies to ALL trims No fragile trims allowed	16 CFR 1500.51-53 Pt. F (Saf Q)	0-5T: No detachment at 17lbs for 10 seconds (no exceptions) ***Must test in original state, after 1 wash, and after 5 washes		
pH Value	AATCC 81	Requirement: 5.0 - 8.0 (No tolerance)		
Colorfastness Properties				
Colorfastness to Crocking ***For Burnout or Garment Dyed products, please make sure to test c/f crocking on BOTH the inside and outside of the garment***	AATCC 8/116 Original State If results fail in original state, perform after 1 Wash/Dry Cycle	All fabrics (except listed below):		
		dry	4.0	
		wet	3.0	
		Pigment Dyed/Printed, Lightly Brushed, Sand Washed, Piled, Sulphur, Denim, Indigo & Silk blends:		
		dry	3.5	
		wet	2.0	
Colorfastness to Chlorine AND Non-Chlorine Bleach	AATCC/ASTM TS-001	Shade Change: Grade 4 min		
ADDITIONAL COLORWAY TESTING				
Flammability	16 CFR 1610	Class 1 Test non-exempt fabrics must be tested in every color		
Formaldehyde	Kohl's TM-5 (only for 4 years and up)	Negative, If Spot Test is Positive, proceed with step 2		
	JIS L 1041:2000 – Sec. 5.3.1 (2) Method B, JIS Water Extraction Method	Children over 4 years & Adults = 75 ppm max. Children's 0-5T = 20 ppm max.		
pH Value	AATCC 81	Requirement: 5.0 - 8.0 (No tolerance)		
Appearance Retention	AATCC/ASTM TS-008 Modified Tide * Powder Detergent	Must meet all applicable Kohl's Appearance Evaluation Requirements (Refer KAR SOP)		
Colorfastness to Crocking ***For Burnout or Garment Dyed products, please make sure to test c/f crocking on BOTH the inside and outside of the garment***	AATCC 8/116 Original State If results fail in original state, perform after 1 Wash/Dry Cycle	All fabrics (except listed below):		
		dry	4.0	
		wet	3.0	
		Pigment Dyed/Printed, Lightly Brushed, Sand Washed, Piled, Sulphur, Denim, Indigo & Silk blends:		
		dry	3.5	
		wet	2.0	
Colorfastness to Chlorine AND Non-Chlorine Bleach	AATCC/ASTM TS-001	Shade Change: Grade 4 min		
Tensile Strength (Wovens)	ASTM D 5034 lbs. (min)	< /= 3.0 oz/sq yd	Tier 1 20 x 15	Tier 2 20x20
		3.1 to 6 oz sq /yd	25x20	30x25
		6.1 to 9 oz/sq yd	40 x35	45 x 40
		>9oz/ sq yd	60x40	75 x 50
Tear Strength (Wovens)	ASTM D 1424 lbs. (min)	< /= 3.0 oz/sq yd	Tier 1 1.5x1.0	Tier 2 2.0 x 1.5
		3.1 to 6 oz sq /yd	2.0x1.5	2.5x2.0
		6.1 to 9 oz/sq yd	2.5x2.0	3.0x2.0
		>9oz/ sq yd	3.5 x 3.0	3.5 x 3.0

Seam Strength/Slippage (wovens)	ASTM D 1683 (Functional Seams) lbs. (min) Record seam slippage at 1/4" opening of seam		Tier 1	Tier 2
		< /= 3.0 oz/sq yd	20/15	20/15
		3.1 to 6 oz /sq yd	25/15	30/20
		6.1 to 9 oz/sq yd	25/20	35/20
		9.1 to 10 oz / sq yd	40/20	50/20
		10.1 to 12 oz/ sq yd	50/20	50/20
		Functional Pockets- Seam Strength	15	15
		Non-Functional Pockets- Seam Strength	Data	Data
Bursting Strength (Knits)	ASTM D 3786 lbs/sq.in (min)		Tier 1	Tier 2
		> 12 oz/ sq yd	60/20	60/20
		< /= 4 oz/ sq yd	30	40
		> 4 oz/ sq yd	40	50
		Lace, mesh etc	15	15
Seam Strength (Knits)	ASTM D 3786 lbs/sq.in (min)		Tier 1	Tier 2
		< /= 4.0 oz / sq yd	30	40
		> 4.0 oz/ sq yd	40	45
		Lace, mesh etc	15	15
REQUIRED WHERE APPLICABLE AT ADDITIONAL COST				
Kohl's Durability Evaluation *	Kohl's Durability Evaluation Tide * Powder Detergent	Fragile trims, heat transfer & screen prints - Must meet all applicable Kohl's Durability Evaluation Requirements		
After wash Garment Weight (Burn Out Garments)	ASTM D 3776 Modified	After wash garment weight loss must not exceed 10 % loss from the original weight.		
Resistance to Unsnapping/Snapping Buttons (Children's of ALL ages)	ASTM D 4846	Requirement = 1.5-8 lbs. max.		
Colorfastness to Saliva * (0-36 months only)	64LFGB B 82.92-3, Part 1	Staining : Grade 4.5 min.		
Colorfastness to Perspiration – Acid Only * (Activewear, Intimates, Linings)	AATCC 15	Shade Change : Grade 4 min Self Staining : Grade 4 min Multi-fiber Staining: Grade 4 min		
Top Stop Attachment Strength (Children's of ALL ages)	ASTM D 2061;22.2	Open End Zippers (2 & 3 Part Zipper Tab) Requirement = Refer to protocol 306 – Zippers		
Zipper Tab Twist (Children's Sizes 0-5T)	ASTM F 963-08	All Decorative (3 or more parts) Zipper Pulls must meet 4.0 in./lbs. minimum		
Pile Retention (Velvet, Velveteen, Velour, Corduroy, and Faux Fur)	ASTM D4685 Option B	Face: 250 Cycles, Grade 3.5 min. Back: 50 Cycles, Grade 3.0 min.		
Nickel Content – as per kohl's safety policy	Kohl's TM-18	Negative		
Leather Thickness	ASTM D 1813	± 10% max deviation from contracted thickness		
Spew (Leather & Suede)	48 hr @ 50o C/90% RH; Then 6 hr @ -20oC	No visible spew		
Blocking of Finish (Leather & Suede)	ASTM D 6116	No sticking together of surface		
Colorfastness to Water * (Color block fabrics & contrast trims)	AATCC 107	Shade Change : Grade 4.0 min Self Staining: Grade 4.0 min Multi-fiber Staining: Grade 4.0 min		
Colorfastness to Sea Water * (Swimwear Only)	AATCC 106	Shade Change : Grade 3.5 min Self Staining: Grade 4.0 min Multi-fiber Staining: Grade 4.0 min		
Colorfastness to Chlorinated Pool Water * (Swimwear Only)	AATCC 162	Shade Change: Grade 3.5 min		
Colorfastness to Light * (Outerwear/Activewear/ Swimwear)	AATCC 16.3-2012 10 AFU & 20 AFU	<u>All Colors (except listed below):</u> <u>Shade Change:</u> <u>10 AFU: Grade 4.0 min</u> <u>20 AFU: Grade 3.5 min</u> <u>Neons/Brights/Whites/Pastels:</u> <u>Shade Change:</u> <u>10 AFU: Grade 3.0 min</u> <u>20 AFU: Grade 2.0 min</u>		
Stretch & Recovery /Tension & Elongation **For garments containing Spandex ** Loose fitting- Note fit on test report ** If performance claim, refer to 401 protocol (Comfort Stretch/ Performance Stretch/ Super Stretch)	ASTM D4964-96(2012) E1 Modification: Take two 7.0 inch long width specimens from a large area of the garment, align the panels with face side out, stitch the two panels and parallel to the width of the specimen. Place another stitch at 5.0 inch from the first stitch, to create 5.0 inch loop circumference specimen **If garment submission is too small - take the largest size possible	To be recorded as data: Report modulus at 30%, 50% & 70%. Growth: Report after 60 seconds Recovery: Report after 60 seconds PASS/FAIL: Report Elongation at 10 lbs Recovery: 85% minimum after 30 minutes. Growth: 7 % maximum after 30 minutes		
Lead Content in Surface Coating – Scrapeable in each color *	CPSC-CH-E1003-09.1	Children of ALL Ages <90 ppm (0.009% total weight) Adults <90 ppm max (0.009% total weight) from Spring 2014 Refer to Kohl's Product Safety Policy for additional requirement on Composite Testing		
Total Lead in Substrate Material * (Accessible components)	CPSC-CH-E1002-08.1/CPSC-CH-E1001-08.1	Children's of ALL ages - <100 ppm max (0.010% total weight) Refer to Kohl's Product Safety Policy for additional requirement on Composite Testing		
Phthalates content	Consumer Product Safety Improvement Act of 2008 / 16 CFR 1307 / CPSC-CH-C1001-09.4 (Mod	Children's toys and childcare articles, before and after use and abuse testing, shall not contain concentrations of more than 0.1% BBP, DBP, DEHP, DINP, DIBP, DPENP, DHEXP or DCHP individually. Component testing is allowed. Compositing up to 3 like materials is allowed. Product manufactured and imported as of April 25, 2018 must comply.		
Soluble Heavy Metals * Applies to Children's Toys	ASTM F 963-17	Children's Toys = Defined as a consumer product designed or intended by the manufacturer for a child, for use by the child when the child plays. Required for children's toys of ALL ages		
		Mercury - 60 ppm	Barium - 1000 ppm	
		Antimony - 60 ppm	Cadmium - 75 ppm	
		Arsenic - 25 ppm	Chromium - 60 ppm	
		Selenium - 500 ppm	Lead - 90 ppm	

Lead, Cadmium and Phthalate* Applicable to children product including: - Child car seats - Clothing - Cosmetics for children under the age of 12 - Jewelry for children under the age of 12 - Products to help a child with sucking or teething, to facilitate sleep, relaxation, or the feeding of a child	Lead and Cadmium EPA SW 846 Method # 3050B/3051 (Mod.) / CPSCCH-E1003-09.1/ CPSC-CHE1002-08.1 / CPSC-CHE1001-08.1 Phthalate CPSC-CHC1001-09.3	Washington Children's Safe Products Act ≤ 90 ppm (lead) ≤ 40 ppm (Cadmium) ≤ 0.1% (DEHP, BBP, DBP, DINP, DIDP, DnHP, DnOP, DIBP, DnPP or DCHP) (individually or in combination) Note: Actual test would be performed on below suggested accessible materials.	
		Substances	Suggested materials
		Lead	Follow CPSC lead
		Cadmium	Follow CPSC lead
		Phthalates	Coating and Plasticized materials
The Washington standard cannot be enforced for products to which a federal standard applies.			

(*) asterisk = ALL COLORWAYS MUST BE TESTED

PRICING AND ADDITIONAL NOTE: *Please refer to Kohl's preferred third party labs for individual pricing and samples needed.

PROTOCOL VERSION	DESCRIPTION OF CHANGE	DATE REVISION / APPROVED BY
203-5	1. Formaldehyde – Modified JIS method to Water Extraction. Updated Children 0-4T req. from 0.05 Absorbency to 20 ppm. 2. Crocking – Updated dry crocking req. from 3.0 to 4.0. 3. Lead in Surface Coating – Updated Adult req. from 600ppm to 90 ppm. 4. Heavy Metals – Updated year of test method from 2008 to 2011. Test applies to both coating and substrate. 5. Added Leather and Suede Tests to Optional Testing Section. 6. Perspiration – Removed Self Staining. Method modified to evaluate self staining through multifiber strip. 7. Light – Updated test method to AATCC 16.3-2012. Changed Neon req. 20 AFU – 2.5 to 2.0 8.Stretch & Recovery (Wovens) – Updated to include both Recovery and Growth req. 9. Added silver/gold/platinum standards.	September 2013/ Vinoth
203-6	Removed pricing for testing/took out Intertek/added approved lab statement	October 6th 2014/Nov. 31 2014/Leah Gross-Hutchison
203-8	Added note to c/f crocking for burnouts and garment dyed products	May 2016/ Jackie Deppisch
203-9	Lead, Cadmium and Phthalate in Washington Children's Safe Products Act	August 2016 - Becky Becker
203-10	1) Attachment Strength - Added "(Must test in original state, after 1 wash, and after 5 washes)" for sizes 0-5T. 2) Fragile Trims - updated size ranges to include 5T 3) Formaldehyde - updated size ranges to include 5T 4) Zipper Tab Twist - updated size ranges to include 5T	February 2017 - Becky Becker
203-11	1) pH value - Added white requirement: 5.0-7.0 2) Blocking of Finish (Leather or Suede) ASTM D 6116 - added MOD	April 2017 - Charlene Swanson / Becky Becker
203-12	1) Updated crocking requirements to read: "Pigment Dyed/Printed, Lightly Brushed, Sand Washed, Piled, Sulphur, Denim, Indigo & Silk blends"	5/2017 Becky Becker
203-13	1) Updated dim stability requirements 2) Updated pH requirements	8/20/2018 Elizabeth Armstrong
203-14	1) Updated soluble heavy metals to harmonized version 2) Updated format	September 2018/Charlene Swanson
203-15	1) Updated Phthalates in each plasticized part/material such as PVC, Vinyl 2) Added dimensional stability dry cleaning info back on	October 2018 - Becky Becker
203-16	1) Updated Tracking Label to include Adult Tracking Label information	March 2019 Jackie Deppisch
203-17	1)Separated Adult & Children tracking label & marked Adult Tracking Label as DATA ONLY	March 2019 Jackie Deppisch
203-18	1) Updated Pile Retention to ASTM D4685 2) Updated Colorfastness to saliva to be most current	March 2019/Charlene Swanson
203-19	1) Updated S&R requirements	April 2019-Jackie Deppisch
203-20	1) Updated handwash test method to AATCC LP2 2) Updated Phthalates requirement to CPSC-CH-C1001-09.4 (Mod)	April 2019 - Becky Becker
203-21	1) Added Tension & Elongation testing	May 2019/Jackie Deppisch
203-22	1) Updated Attachment strength requirements	June 2019/ Jackie Deppisch
203-23	1) Updated Attachment strength requirements, split out adult from children	Aug 2019 - Elizabeth Armstrong
203-24	1) Revised attachment strength requirements	Aug 2019 - Elizabeth Armstrong
203-25	1) Updating Stretch & Recovery 2) Removed "Ultra" from Tide detergent 3) Removed "Plastic" from hanger loops	Nov 2019-Jackie Deppisch
203-26	1) Updated dry cleaning to be up to 3 cycles (AATCC 158) for dimensional stability	December 2019/Charlene Swanson
203-27	1) Updated separate section of dry cleaning to be 3 cycles as well	January 2020/Charlene Swanson
203-28	1) Updated to combine S&R and T&E testing into one TM 2) Updated Adult Tracking Label to a REQUIREMENT	February 2020/ Jackie Deppisch
203-29	1)Updated Adult Tracking Label as PASS/FAIL 2) Updated S&R TM	February 2020/ Jackie Deppisch
203-30	1) Updated Stretch & Recovery requirements	March 2020/Charlene Swanson
203-31	1) Updated Stretch & Recovery requirements	April 2020/Charlene Swanson
203-32	1) Updated S&R requirements 2) Updated Tensile Strength requirements	January 2021/ Jackie Deppisch
203-33	1) Updated Tiers	August 2021/ Jackie Deppisch

203-34	1) Removed "ultra" tide detergent 2) Updated additional colorway testing for tear strength, seam strength/slippage, tensile strength, bursting strength 3) Updated email for adult tracking label	October 2021/Charlene Swanson
203-35	1) Added test line for all performance claims	March 2022 / Becky Becker
203-36	1) Added Reference to Protocol 501	October 2022 / Kevin Makocy
203-37	1) Added Woven Yarn Count Test Method ASTM D 3775 2) Added Softlines Regulatory Supplemental Protocol	March 2023 / Violet Nelson