

## PROTOCOL # 601-37

### Sheets / Pillowcases / Infant Sheets / Changing Pad Cover Sheets

Performance Test	Test Method	Requirement
<b>Initial Package</b>		
<b>Label Verification</b>		
Label Review	Care Labeling 16 CFR 423  16 CFR 300/ 19 CFR 134  Textile Fiber Products Identification Act 16 CFR 303  Wool Products Labeling Act	<b>Verify Information on TRF matches the label</b>  Fiber content, Care, Country of Origin, Manufacturers Registration Number, Wool Products Registration Number must meet Federal Standards  If labeling or packaging is not attached to product, artwork must be provided
Tracking Label:  <b>Children's product: ALL ages</b>	Consumer Product Safety Improvement Act of 2008 (CPSIA)  SEC. 103	<b><u>Refer to Kohl's Tracking Label Section in the Labeling Guideline Policy.</u></b> <b><u>Following information must be provided:</u></b> Retailer's Name (Kohl's) Style Number/Name Factory Number Date (Month/Year)
Adult Tracking Label: <i>**If space limitations exist, contact Kohl's Quality Assurance &amp; Product Integrity teams to discuss minimum required information (quality.assurance@kohls.com)**</i>	Kohl's Requirement	<b>TO BE MARKED AS PASS/FAIL</b> Can be included on packaging when necessary: Kohl's Assigned Factory Number Manufacture Date (Month/Year) UPC #
Packaging Review  Actual packaging or artwork must be provided	FPLA/ UPLR 16 CFR 500 & 19 CFR 134	Should be legibly marked with the following information and verified: -Distributor's name, trademark or other means of identification of the manufacturer or packer and address (City, State, Zip) -Product identification - Net quantity of the contents in terms of weight, measure or numerical count (metric & US standard) or a combination so as to give accurate information and facilitate value comparison by the consumer (if applicable) -Country of origin (if imported) -Product Size (if applicable) <b>Refer to Kohl's FPLA/ UPLR guideline</b>
Product Warning Labels (Infant Fitted Sheets Only)	ASTM F1917 -20e1 Section 8.6.6	Refer to Section 8.6.6 of ASTM F1917 for fitted sheets
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.
Performance Claims for Home Textile Products (1000)	Refer to Protocol 1000	All samples shall be reviewed against the requirements of the Performance Claims for Home Textile Products Protocol to determine if additional testing or labeling is required.

Physical Properties		
Fiber Content	AATCC 20/ 20A  Wool Products Labeling Act	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
Count	ASTM D 3775/ ASTM 3887/ AATCC/ASTM TS-002	Sheets + 5/-3% max Others +/- 5% max Unless stated on the packaging, packaging claims + 5% max
Fabric Weight	ASTM D 3776	Contracted Weight: +/- 5% max deviation
Product Size	Kohl's TM-8	If claimed on packaging: Refer to Kohl's Private Brands Construction Standards for Bedding & Sheeting (under Tech Design tab).  If not claimed on packaging: Report Actual
Lint Loss <i>for brushed fabrics only</i>	Kohl's TM-4	Lint Loss: 1% maximum for 1 flat/fitted sheet
Performance Test	Test Method	Requirement
<b>Analytical</b>		
Tech Pack Verification* (Needs to be provided - Lab HOLD if not provided)	Visual Check	Verify all claims mentioned in Tech Pack file
Yarn Size	ASTM D 1059	Contracted Yarn Size: +/- 5% max deviation
Flammability	ASTM D 1230	Class 1
Formaldehyde - Adults & children over 5T	Kohl's TM-5  JIS L 1041:2011- Sec. 8.1.3 & 8.1.4 Method A or B	Negative, If Spot Test is Positive/ inconclusive, proceed with step 2  Children <u>over 5T</u> & Adults = 75 ppm max.
Formaldehyde - Children's 0-5T	JIS L 1041:2011- Sec. 8.1.3 & 8.1.4 Method A or B	Children 0-5T = 20 ppm max.
pH Value	AATCC 81	All Colorways 5.0 - 8.0 (No tolerance)
CA Prop 65* (if applicable)	Refer to protocol 1300	All samples shall be reviewed against the requirements of California Prop 65.
Monofilament thread (Infant Bedding & Changing Pad Cover Sheets)	ASTM F1917-12 Clause 5.3	No monofilament thread allowed
Size of decorative components (Infant Fitted Sheets) (Toddler Shams)	ASTM F1917-12 Clause 5.2	Decorative Components shall not exceed 7 inches when it is extended to maximum under a force of 5lbf (22 N). Note: Loops formed by tangling decorative components shall not have perimeter exceeding 14 inches (360 mm).

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	
Dimensional Change			
Dimensional Change to Home Laundering or Dry-cleaning  (entire sample to be washed)	AATCC 150 (after 3 washes) / AATCC 158 (1 cycle) (Length X Width)  Tide® Powder Detergent		Tier 1
		Wovens	-4% max
		Flannel	-6% max
		Knits	-8% max
		Growth	+2% max
		Dry Cleaning	+/- 2% max
		Tier 2: Use same requirements as Tier 1, evaluate after 3 and 5 washes or 1 dry clean	
Appearance Retention	AATCC/ASTM TS-008 Modified Tide® Powder Detergent	Must meet all applicable Kohl's Appearance Evaluation Requirements.  Must meet all applicable Kohl's Pilling requirements: 4.0 Min	
Fit Test (Adult Queen Fitted Sheets)	Kohl's TM-27	Must meet all applicable requirements as per the test method.	
Fit Test (Infant Fitted Sheets)  Crib Mattress Size - 28"W x 52"L x 6"H	AATCC/ASTM TS-008 Modified Tide® Powder Detergent	Make sure crib fitted sheet fits snugly on the crib mattress and that the sheet overlaps the mattress so it cannot be dislodged by pulling on the corner of the sheet.	
Performance Test	Test Method	Requirement	
Strength & Durability			
Tensile Strength (wovens only)	ASTM D 5034  (CRT/CRE Tensile Testing Machine)		Tier 1
		≤ 4.0 oz/sq. yd	25 lbs min
		> 4.0 to ≤ 8.0 oz/sq. yd	30 lbs min
		> 8.0 oz/sq. yd	35 lbs min
		Tier 2: Use same requirements as Tier 1, evaluate original state & after 5 washes or 1 dry clean	
Tear Strength (wovens only)	ASTM D 1424  (Elmendorf)		Tier 1
		≤ 4.0 oz/sq. yd	2 lbs min
		> 4.0 to ≤ 8.0 oz/sq. yd	2.5 lbs min
		> 8.0 oz/sq. yd	3 lbs min
		Tier 2: Use same requirements as Tier 1, evaluate original state & after 5 washes or 1 dry clean	
Seam Slippage/ Seam Strength (wovens only)	ASTM D 1683		Tier 1
		All seams and seam slippage	25 lbs min
		Tier 2: Use same requirements as Tier 1, evaluate original state & after 5 washes or 1 dry clean	
Bursting Strength (knits only)	ASTM D 3786		Tier 1
		Fabric	40 lbs /sq. inch
		Seams	30 lbs /sq. inch
		Tier 2: Use same requirements as Tier 1, evaluate original state & after 5 washes or 1 dry clean	

Colorfastness		
Colorfastness to Crocking	AATCC 8/116	All fabrics/ dyes (except listed below): Dry - Grade 4 min Wet - Grade 3 min  Pigment Dyed/ Printed, Direct Dye, Vat Dye, Sulfur, Lightly Brushed, Piled, Indigo: Dry - Grade 3.5 min Wet - Grade 2 min
Colorfastness to Chlorine Bleach AND Non-Chlorine Bleach	AATCC/ASTM TS-001	Shade Change - Grade 4 min
Colorfastness to Saliva (Infant Bedding)	LFGB §64 BVL B82.10.1	Shade Change - Grade 4.5 min
ADDITIONAL COLORWAY TESTING		
Appearance Retention	AATCC/ASTM TS-008 Modified  Tide® Powder Detergent	Must meet all applicable Kohl's Appearance Evaluation Requirements
Colorfastness to Chlorine Bleach AND Non-Chlorine Bleach	AATCC/ASTM TS-001	Shade Change - Grade 4 min
Colorfastness to Crocking	AATCC 8/116	All fabrics/ dyes (except listed below): Dry - Grade 4 min Wet - Grade 3 min  Pigment Dyed/ Printed, Direct Dye, Vat Dye, Sulfur, Lightly Brushed, Piled, Indigo: Dry - Grade 3.5 min Wet - Grade 2 min
Flammability	ASTM D 1230	Class 1
Formaldehyde - Adults & children over 5T	Kohl's TM-5  JIS L 1041:2011 Sec. 8.1.3 & 8.1.4 Method A or B	Negative, If Spot Test is Positive/ inconclusive, proceed with step 2  Children <u>over 5T</u> & Adults = 75 ppm max.
Formaldehyde - Children's 0-5T	JIS L 1041:2011 Sec. 8.1.3 & 8.1.4 Method A or B	Children 0-5T = 20 ppm max.
pH Value	AATCC 81	All Colorways 5.0 - 8.0 (No tolerance)
Performance Test	Test Method	Requirement
OPTIONAL TESTING - TOXICOLOGY TESTING (required where applicable at additional cost)		
Lead Content in Surface Coating - Scrapeable in each color*	CPSC-CH-E1003-09.1	<b>Children &amp; Adult Products</b> ≤ 90 ppm (0.009% total weight)
Total Lead in Substrate Material*	CPSC-CH-E1002-08.3/ CPSC-CH-E1001-08.3	Children of ALL ages - Accessible components in each part/ material  ≤ 100 ppm (0.010% total weight)

Phthalates in each plasticized part/material such as PVC, Vinyl *	CPSC-CH-C1001.09.3	<b>Applies to ALL Children's Products</b> ≤ 1000 ppm max (0.1% max total) BBP, DBP, DEHP, DINP, DIDP, DNOP  ≤ 1000 ppm max (0.1% max each individual) DCHP, DIBP, DnHP/DHEXP, DPP/DPENP  <b>ALL Adult products</b> ≤ 1000 ppm max (0.1% max total) BBP, DBP, DEHP, DINP, DIDP, DNOP  ≤ 1000 ppm max (0.1% max each individual) DCHP, DIBP, DnHP/DHEXP, DPP/DPENP									
Soluble Heavy Metals *  Applies to Children's Toys	ASTM F963	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 Antimony - 60 ppm Arsenic - 25 ppm Selenium - 500 ppm Barium - 1000 ppm Cadmium - 75 ppm Chromium - 60 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	<u>Lead and Cadmium</u> EPA SW 846 Method # 3050B/3051 (Mod.) / CPSCCH-E1003-09.1/ CPSC-CHE1002-08.1 / CPSC-CHE1001-08.1  <u>Phthalate</u> CPSC-CH-C1001-09.3	Washington Children's Safe Products Act  ≤ 90 ppm (Lead) ≤ 40 ppm (Cadmium) ≤ 0.1% max total (BBP, DBP, DEHP, DINP, DIDP, DNOP) ≤ 0.1% max each individual (DCHP, DIBP, DnHP/DHEXP, DPP/DPENP)  Note: Actual test would be performed on below suggested accessible materials. <table><tr><td><b>Substances</b></td><td><b>Suggested materials</b></td></tr><tr><td>Lead</td><td>Follow CPSC lead</td></tr><tr><td>Cadmium</td><td>Follow CPSC lead</td></tr><tr><td>Phthalates</td><td>Coating and Plasticized materials</td></tr></table>  The Washington standard cannot be enforced for products to which a federal standard applies.		<b>Substances</b>	<b>Suggested materials</b>	Lead	Follow CPSC lead	Cadmium	Follow CPSC lead	Phthalates	Coating and Plasticized materials
<b>Substances</b>	<b>Suggested materials</b>										
Lead	Follow CPSC lead										
Cadmium	Follow CPSC lead										
Phthalates	Coating and Plasticized materials										
<b>Performance Test</b>	<b>Test Method</b>	<b>Requirement</b>									
<b>OPTIONAL TESTING</b> -(required where applicable at additional cost)											
Resistance to Saliva (Infant & Children sheets and pillowcases only)*	64 LFGB B82.92-3 Part 1	Color Change: Grade 4 min Staining: Grade 4 min									
Colorfastness to Water* (Color block fabrics & contrast trims)	AATCC 107	Shade Change: Grade 4 min Self Staining: Grade 4 min Staining: Grade 3.5 min									

Attachment Strength* A) Applies to all Rings/Sliders  B) Applies to Buttons, Snaps, Small Parts, Belt Loops, Zipper Tab, etc.  C) Applies to Plastic Hanger Loops  D) Over 5T-Adult: Fragile Trims: Beads, Rhinestones, etc.	16 CFR 1500.51-53 Pt. F (Saf Q)	A) REQUIREMENT: 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
Sharp Points & Sharp Edges *	CPSC 16 CFR 1500.48 - 49	No sharp points or sharp edges - Refer to Product Safety Policy

**(\*) asterisk = ALL COLORWAYS MUST BE TESTED**

Please consult with Lab for the number of samples.

**Pricing: Please refer to Kohl's preferred third party labs for individual pricing**

PROTOCOL VERSION	DESCRIPTION OF CHANGE	DATE REVISION/ APPROVED
601-1	1) Label Review – Added 16 CFR 300, 19 CFR 134. Lab is required to verify information on TRF and match to label submission. 2) Added Tracking Label Review on Children's Products. 3) Added product warning labels for infant bumper pads and fitted sheets only. 4) Added count 5) Formaldehyde Spot Test – Method changed from Intertek USA #416 to Kohl's TM-5. 6) Fit Test – Added mattress dimensions 7) Fit Test (infant fitted sheets) – Added mattress dimensions 8) Tensile Strength – Added CRT Tensile testing machine. 9) Added pH Value 10) Added test ribbons, strings and ties on bumper pads test 11) Lead Surface Coating – Corrected method from 16 CFR 1303 to CPSC-CH-E1003-09. Also, added requirement for Adult products. 12) Lead Substrate – Corrected method from EPA 3050B or EPA 3051 to CPSC-CH-E1002-08/CPSC-CH-E1001-08. 13) Phthalates – Corrected method from ASTM D3421 to CPSC-CHC1001.09.2. 14) Heavy Metals – Corrected method from ASTM F 963-07 to ASTM F 963-08. 15) Resistance to Saliva – Changed test method from 35 LMBG 82.10 to 64 LFGB B82.10-1.	Amy Her/ Aug 2011

601-2	<ul style="list-style-type: none"> <li>1) Added Ultra to the Tide ® detergent</li> <li>2) Removed no tolerance for wool products from fiber content section</li> <li>3) Added packaging review</li> <li>4) Added yarn size and product size to the initial testing package</li> <li>5) Updated test method for adult queen fitted sheets to Kohl's TM-27</li> <li>6) For formaldehyde test included "if positive/inconclusive proceed with step 2" also updated requirement for children to 20 ppm</li> <li>7) Updated testing requirements for dimensional stability, tensile strength, tear strength, seam strength/slippage and bursting strength to include requirements for tier 1, tier 2 &amp; tier 3</li> <li>8) Updated the c/f to crocking requirement for pigment dyed/printed, etc. To dry grade 3.5</li> <li>9) Added pH testing to initial and additional colorway testing</li> <li>10) Attachment strength included, evaluate small parts and added requirement for fragile trims for tier 1, tier 2, &amp; tier 3</li> <li>11) Added tensile strength, tear strength, seam strength/slippage and bursting strength to the additional colorway package for silver brands.</li> <li>12) Updated test method for Resistance to saliva to 64 LFGB B82.92-3 Part 1</li> <li>13) Updated test method for toxicology tests</li> </ul>	Kristi Sachs/ Jan 2014
601-3	<ul style="list-style-type: none"> <li>1) For packaging review added that artwork can be submitted as well as updated the product size to be if applicable</li> <li>2) Updated Tier 2/3 testing requirements for dimensional change, tensile strength, tear strength, seam strength and bursting strength.</li> <li>3) Removed strength tests from additional colorway testing</li> <li>4) For additional colorway testing removed "Only for Tier 1 brands"</li> <li>5) Removed Shams/Pillow covers/Bedskirts from 601 protocol, moved to 602.</li> </ul>	Kristi Sachs/ Sept 2014
601-4	<ul style="list-style-type: none"> <li>1) Removed pricing from protocol</li> <li>2) Added Fabric Weight and Low Pilling tests to protocol for Flannel/ Brushed/ Napped products</li> </ul>	J. Deppisch/ Nov 2014
601-5	<ul style="list-style-type: none"> <li>1) Added Phthalates testing for adults</li> </ul>	J. Deppisch/ Nov 2014
601-6	<ul style="list-style-type: none"> <li>1) Updated number of samples needed for sheets</li> </ul>	J. Deppisch/ Feb 2015
601-7	<ul style="list-style-type: none"> <li>1) Updated product size to include Tech Design's tolerances</li> </ul>	J. Deppisch/ Sept 2015
601-9	<ul style="list-style-type: none"> <li>1) Added Lead, Cadmium, and Phthalate testing for children</li> </ul>	C. Swanson/May 2017
601-10	<ul style="list-style-type: none"> <li>1) Updated Count with correct requirements for sheets max</li> </ul>	C. Swanson/August 2017
601-11	<ul style="list-style-type: none"> <li>1) Updated Formaldehyde for children to be up to 5T</li> <li>2) Updated pH value to include white colorway ratings</li> </ul>	C. Swanson/October 2017
601-12	<ul style="list-style-type: none"> <li>1) Added Prop 65 testing</li> </ul>	C. Swanson/November 2017
601-13	<ul style="list-style-type: none"> <li>1) Updated Phthalates testing</li> </ul>	C. Swanson/December 2017
601-14	<ul style="list-style-type: none"> <li>1) Update Tide detergent to correct name</li> <li>2) Updated formaldehyde to be up to date</li> </ul>	C. Swanson/January 2018
601-15	<ul style="list-style-type: none"> <li>1) Update Tide detergent to be correct name for Appearance Retention and Fit Test</li> <li>2) Update formaldehyde test to be up to date (2011 instead of 2000)</li> </ul>	C. Swanson/February 2018

601-16	1) Updated pH value to be 5.0-8.0 2) Updated Phthalates testing for Washington law to include coated materials 3) Updated Soluble Heavy Metals to be ASTM F 963-17	C. Swanson/October 2018
601-17	1) Updated Tracking Label to include Adult Tracking Label requirements	J. Deppisch/March 2019
601-18	1) Separated Adult Tracking Label & marked as DATA ONLY	J. Deppisch/March 2019
601-19	1) Updated phthalates testing to call out max total and max individual testing	C. Swanson/April 2019
601-20	1) Removed additional testing for flannel/brushed/napped fabrics for Fabric Weight and Appearance Retention 2) Added monofilament thread testing for infant bedding 3) Added colorfastness to saliva testing for infant bedding 4) Added Size of Decorative Component testing for infant bedding 5) Updated Product Warning Labels for fitted sheets to most current method	C. Swanson/May 2019
601-21	1) Removed section for additional testing for flannel/brushed/napped fabric requirements for Fabric Weight	C. Swanson/June 2019
601-22	1) Added Changing Pad Cover Sheet to testing	C. Swanson/July 2019
601-23	1) Updated Attachment strength for both performance and regulatory	B. Becker/ August 2019
601-24	1) Updated Attachment strength for both performance and regulatory	C. Swanson/August 2019
601-25	1) Updated format	C. Swanson/September 2019
601-26	1) Added Tech Pack Verification	C. Swanson/November 2019
601-27	1) Updated Adult Tracking Label to REQUIREMENT	J. Deppisch/March 2020
601-28	1) Added Lint Loss test for brushed fabrics only	C. Swanson/December 2020
601-29	1) Removed Tier 3 requirements	B. Becker/ August 2021
601-30	1) Updated thread count requirements for sheets 2) Updated email address for adult tracking labels	C. Swanson/October 2021
601-31	1) Updated Tensile Strength requirements	C. Swanson/February 2022
601-32	1) Added Toddler Shams to ASTM F1917-12 testing requirements	C. Swanson/March 2022
601 - 33	1) Added test line for all performance claims	March 2022 / Becky Becker
601-34	1) Added 501 Supplemental Labeling	November 2022/Jackie Deppisch
601-35	1) Updated "Product Warning Labels (Infant Fitted Sheets Only)" to reference ASTM F1917 -20e1 Section 8.6.6	January 2023 / Violet Nelson
601-36	1) Removed year from ASTM F963 and updated email address for adult tracking labels	C. Swanson / February 2024
601-37	1) Corrected formatting of row 39 (Appearance Retention) and removed pill resistance requirements (instead refer to Protocol 1000).	K. Anderson / August 2025