311-4				
Wire Casings (Knit and Woven)				
PERFORMANCE	TEST METHOD	REQUIREMENT		
INITIAL PACKAGE / FULL PACKAGE				
Physical Properties				
		One Fiber Only: No Tolerance		
		Two or More Fibers: +/- 3% max deviation from contracted fiber content		
Fiber Content	AATCC 20/20A	Functional Fibers i.e. Spandex: +/- 2% max deviation from contracted fiber		
		content		
Width	Kohl's TM-8	Report Actual Measurements in mm		
Dimensional Change				
-	AATCC 135/158(3 washes) /	-1.5% for regular		
Dimensional Change to Home Laundering AND Dry Cleaning	Dry Clean (1 cycle) Ultra Tide  Powder Detergent	-2.5% for microfiber (length of casing only)		
	AATCC/ASTM TS-008 Modified	Color Change: Grade 4 min. Staining: Grade 4 min.		
Appearance Retention after Laundering AND Dry Cleaning	Ultra Tide ® Powder Detergent	Plus any additional comments		
Strength & Durability	ļ			
Wire Casing Pin Penetration	Kohl's TM 26	50 lb. Minimum		
Colorfastness				
Colorfastness to Chlorine Bleach AND Non-Chlorine Bleach	AATCC/ASTM TS-001	Shade Change: Grade 4 min		
Colorfastness to Perspiration	AATCC 15	Shade Change: Grade 4 min Staining: Grade 4 min		
Colorfastness to Crocking	AATCC 8/116	Dry - Grade 4 min Wet - Grade 3 min		
Colorfastness to Water	AATCC 107	Shade Change: Grade 4 min Staining: Grade 4 min		
Colorfastness to Atmospheric Fumes (white casings only)	AATCC 23	Grade 4 min		
Phenolic Yellowing	ISO 105-X 18:2007	Shade Change: Grade 4.0 min		
(white casings only) Analytical				
	Kohl's TM-5 (only for 4 years and up)			
		Negative, If Spot Test is Positive, proceed with step 2		
Formaldehyde	JIS L 1041:2000 –			
		Children <u>over 4 T &amp;</u> Adults = 75 ppm max.		
	Sec. 5.3.1 (2) Method B, JIS Water Extraction			
pH	Method AATCC 81	Children's 0-4T = 20 ppm max. 6.0 - 8.0		
ADDITIONAL COLORWAY TESTING	ANTOO UT			
	AATCC/ASTM TS-008 Modified	Color Change: Grade 4 min. Staining: Grade 4 min.		
Appearance Retention after Laundering AND Dry Cleaning	Ultra Tide ® Powder Detergent	Plus any additional comments		
Colorfastness to Chlorine Bleach AND Non-Chlorine				
Bleach	AATCC/ASTM TS-001	Shade Change: Grade 4 min		
Colorfastness to Perspiration	AATCC 15	Shade Change: Grade 4 min Staining: Grade 4 min		
Colorfastness to Crocking	AATCC 8/116	Dry - Grade 4 min Wet - Grade 3 min		
Colorfastness to Water	AATCC 107	Shade Change: Grade 4 min		
		Staining: Grade 4 min		
	Kohl's TM-5 (only for 4 years and up) JIS L 1041:2000 - Method	Negative, If Spot Test is Positive, proceed with step 2 Children over 4 years & Adults = 75 ppm max. Children's 0-4T = 20 ppm max.		
Formaldehyde				
Formaldehyde pH	AATCC 81	6.0 - 8.0		
рН		6.0 - 8.0 Shade Change: Grade 4 min Staining: Grade 4 min		
PH REQUIRED WHERE APPLICABLE AT ADDITIONAL C	OST	Shade Change: Grade 4 min		
pH REQUIRED WHERE APPLICABLE AT ADDITIONAL C Colorfastness to Sea Water*	AATCC 106	Shade Change: Grade 4 min Staining: Grade 4 min		

311-4 Wire Casings (Knit and Woven)				
PERFORMANCE	TEST METHOD	REQUIREMENT		
Lead Content in Surface Coating - Scrapeable in each color*	CPSC-CH-E1003-09.1	Children & Adult Products ≤ 90ppm (0.009% by weight) Refer to Kohl's Product Safety Policy for additional requirement on Composite Testing		
Total Lead in Substrate Material*	CPSC-CH-E1002-08.1/ CPSC-CH-E1001-08.1	Children's of ALL ages & Adult products ≤100 ppm (0.010% total weight) Refer to Kohl's Product Safety Policy for additional requirement on Composite Testing		
Phthalates in each plasticized part/material such as PVC, Vinyl*	CPSC-CH-C1001.09.3	Children's & Adult Products (Coatings Shall be tested) ≤1000 ppm (0.1%) in each part of DEHP, DBP, BBP, DINP, DIDP, DNOP, & DNHP Refer to Kohl's Product Safety Policy for additional requirement on Composite Testing		
Soluble Heavy Metals* Applies to Children's Toys	ASTM F 963-11	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 agesMercury - 60 ppmBarium - 1000 ppmAntimony - 60 ppmCadmium - 75 ppmArsenic - 25 ppmChromium - 60 ppmSelenium - 500 ppmLead - 90 ppm		

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

\*\*\*ALL COMPONENTS MUST BE TESTED FOR TOXICOLOGY\*\*\*

## Minimum Sample Size Necessary for Testing

Initial Package: 2 yards

Additional Colorway: 1 yard

Toxicology Testing Consult with approved lab for the number of samples Applicant is to select appropriate number of fabric layers based on end use application.

\*\*Please refer to Kohl's preferred third party labs for individual and optional testing pricing

Turn Around Time = 6 working days

If Formaldehyde Spot Test is found positive, additional charges will incur for additional testing. For sizes 0-4T, Formaldehyde will be added as a separate charge as it is a mandatory test for this category.

PROTOCOL VERSION	DESCRIPTION OF CHANGE	DATE REVISION / APPROVED BY
311-1	Protocol Created	March 2013 / Devon Engel
	1. Formaldehyde – Updated JIS method to Water	
311-2	Extraction and updated 0-4T req. to 20 ppm.	May 2013 / Vinoth Deenadayalan
311-3	Removed pricing for testing/took out Intertek/added approved lab statement	October 6th 2014/Nov. 31 2014/Leah Gross-Hutchison
311-4	Add Formaldehyde method B	December 4th 2014