

**PROTOCOL # 431-B**

**Hammocks**

Performance Test	Test Method	Samples	Requirement	Rating (Section or exec. Summary which failed items can be referenced)
<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	All Samples	Should be legibly marked with the following information: -Distributor's name, trademark or other means of identification of the manufacturer or packer & 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 -Country of origin (if imported)	
Import Permit (For Natural Materials Only) If Applicable	US Department of Agriculture Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ)	All Samples	Product shall not have prohibited materials present per US Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ)  Documentation and/ or proper permit(s) for specific product shall be supplied along with Testing Request form and samples.  Permit information may be found at: <a href="https://www.aphis.usda.gov/wps/portal/aphis/home/">https://www.aphis.usda.gov/wps/portal/aphis/home/</a>  It is the vendor's responsibility for the compliance to relevant requirements.	
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	All Samples	<b>Should be rated as pass/fail</b> Can be included on packaging when necessary: Kohl's Assigned Factory Number Manufacture Date (Month/Year) UPC #	
EPA TSCA Title VI – Composite Wood - Sample Declaration Form and Mill Certificate (if applicable)	40 CFR 770	All Samples	If wood of any type is present in the sample, submitter shall provide a completed and signed Sample Declaration Form. Sections A, B, and E of the Sample Declaration Form must always be completed. • If regulated composite wood is not present in the sample, result is N/A. • If regulated composite wood is present in the sample: - Submitter shall provide a copy of the certificate issued by the Third Party Certifier (TPC) for the mill(s) from which the raw panels were purchased - All information on the certificate shall be consistent with the Sample Declaration Form - Section D of the Sample Declaration Form must also be completed  Notes: • Include a copy of the Sample Declaration Form in the report • Regulated composite wood includes: - Hardwood plywood (HWPW) - Medium-density fiberboard (MDF) - Thin medium-density fiberboard (Thin MDF) - Particleboard (PB) • Mill certificate must indicate compliance with TSCA Title VI. It is no longer acceptable to have the certificate indicate compliance with CARB's ATCM for formaldehyde in lieu of compliance with TSCA Title VI.	
EPA TSCA Title VI – Composite Wood - Raw Panel Labeling (if applicable)	40 CFR 770.45(a)	All Samples	• Panels or bundles of panels must be labeled with the following: - The panel producer's name - The lot number - The number of the EPA TSCA Title VI Third Party Certifier (TPC) - A statement of compliance to denote that the panels comply with TSCA Title VI Notes: • A panel producer number may be used instead of a name to protect identity • Raw panels are regulated composite wood products that have not been used to create a finished good • The compliance statement must denote compliance with the TSCA Title VI. It is no longer acceptable to have the panel labeled as compliant with CARB's ATCM for formaldehyde in lieu of TSCA Title VI compliance statement.	

<p>EPA TSCA Title VI – Composite Wood</p> <p>Finished Good Labeling</p>	<p>40 CFR 770.45(c)</p>	<p>All Samples</p>	<p>Finished goods <b>containing regulated composite wood</b> shall comply with the labeling requirements found in 40 CFR 770.45(c).</p> <p>At a minimum, the label must be on the product OR the packaging The label may be applied as a stamp, tag, or sticker The label shall include, at a minimum, in legible English text:</p> <ol style="list-style-type: none"> <li>1. Fabricator’s name</li> <li>2. Date the finished good was produced (in month/year format)</li> <li>3. A statement of compliance to denote that the finished good complies with TSCA Title VI</li> </ol> <p>Example: XXX Company MM/YYYY EPA TSCA Title VI compliant for formaldehyde</p> <p><b>Notes:</b> <b>Client does not allow the use of the de minimis exception found in 40 CFR 770.45(e). All finished goods containing regulated composite wood shall include labeling pursuant to the above requirements of 40 CFR 770.45(c).</b> <b>A statement of compliance that denotes the finished good complies with CARB’s ATCM for formaldehyde will be accepted in lieu of a TSCA Title VI compliance statement until March 22, 2019.</b></p> <p>Rating Schedule: On or after June 1, 2018: Compliant submission shall be rated as pass Non-compliant submission shall be rated as fail</p>
<p>CARB ATCM for Formaldehyde – Composite Wood</p> <p>Finished Good Labeling</p>	<p>Title 17, California Code of Regulations Section 93120.7(d)</p>	<p>All Samples</p>	<p>Finished goods containing regulated composite wood shall comply with the labeling requirements for fabricators found in §93120.7(d).</p> <p>A finished good containing regulated composite wood requires the following: At a minimum, the label must be on the product OR the packaging The label shall be applied as a stamp, tag, sticker, or bar code The label shall include, at a minimum:</p> <ol style="list-style-type: none"> <li>1. Fabricator’s name</li> <li>2. Date the finished good was produced (in month/year format)</li> <li>3. A statement of compliance to denote that the finished good complies with the ATCM</li> </ol> <p>Example: XXX Company MM/YYYY California 93120 phase 2 compliant for formaldehyde</p> <p><b>Notes:</b> <b>If a finished good is labeled with the EPA compliance statement, a separate statement of compliance to the CARB ATCM is not required.</b> <b>It is not required for the label to state the level of emissions (Phase 2, NAF, ULEF).</b> <b>Labels for finished goods should not include the number of the TPC associated with the composite wood products contained in the finished good.</b></p>
<p>Formaldehyde Emission of Composite Wood Product - State of California (if applicable)</p>	<p>Airborne Toxic Control Measure (ATCM), California Code of Regulations, Title 17, § 93120</p>	<p>All Samples</p>	<p>Composite wood products include finished goods composed of or containing hardwood plywood (HWPW) made with either a combination core (CC) or a veneer core (VC), particleboard (PB), and medium-density fiberboard (MDF), or finished goods composed of such products made with no-added formaldehyde based (NAF-based) resins or ultra-low emitting formaldehyde (ULEF) resins, shall not release formaldehyde exceeding the regulatory limits.</p> <p>In lieu of testing, valid certificate or test report or certificate can be submitted if dated within one year.</p>
<p>Labeling of Composite Wood Product - Formaldehyde Emission - State of California (if applicable)</p>	<p>Airborne Toxic Control Measure (ATCM), California Code of Regulations, Title 17, § 93120</p>	<p>All Samples</p>	<p>Composite wood products include finished goods composed of or containing hardwood plywood (HWPW) made with either a combination core (CC) or a veneer core (VC), particleboard (PB), and medium-density fiberboard (MDF), or finished goods composed of such products made with no-added formaldehyde based (NAF-based) resins or ultra-low emitting formaldehyde (ULEF) resins, shall be labeled in accordance with the regulations and meet all applicable requirements.</p> <p>In lieu of testing, valid certificate or test report or certificate can be submitted if dated within one year.</p>

Uniform Law Labels for Bedding & Upholstered Furniture	IABFLO	All Samples	<p>All filling materials must have a securely affixed label which contains the following information:  The statement "UNDER PENALTY OF LAW THIS TAG NOT TO BE REMOVED EXCEPT BY THE CONSUMER";  A description of the filling contents preceded by the statement "ALL NEW MATERIALS consisting of";  The assigned state registration number*, for example in Pennsylvania, the number is preceded by the abbreviation REG. NO. PA (the # symbol is not accepted); and  The statement: Certification is made by the manufacturer that the materials in this article are described in accordance with the law.</p> <p>For animal or fowl or any other material requiring sterilization, the tag must also bear the following information:  A permit number of the sterilizer, only if sterilized new material is used; and  The statement "CONTENTS STERILIZED" (this is not acceptable in California).</p> <p>The statement of MADE BY (for manufacturer ) or MADE FOR (for importer or distributor) with full street address  The statement of "Finished Size", "Net Weight of Filling Material", "Cover:" (client's requirement)  The statement of country of origin. e.g. MADE IN CHINA  The tag must be constructed of white linen cloth or spun bonded olefin having a minimum size of 2in x 3in, (the length starts at the beginning of the word "UNDER" and ends at the country of origin on the bottom of the law label), and must be printed in black ink with a minimum type height of 1/8 inch (3.2millimeters).</p>	
Instructional Literature (Assembly Instruction) (Needs to be provided – Lab HOLD if not provided)	Visual Check	All Samples	Shall provide safe use, or proper assembly or both, and care instruction. Shall be legible and easy to read with no errors or spelling mistakes.	<input type="checkbox"/> Provided <input type="checkbox"/> Verified <input type="checkbox"/> Not Provided
Verify Label Claims	Visual Check	All Samples	The labeling must comply and valid with all claims.	
<b>Analytical</b>				
pH Value	AATCC 81	All Samples	All Colorways 5.0 - 8.0 (No tolerance)	
Fiber Content	AATCC 20/ 20A	All Samples	One Fiber Only: No Tolerance	
	Wool Products Labeling Act		Two or More Fibers: +/- 3% max deviation from contracted fiber	
*Lead In Scrapable Surface Coating	CPSC-CH-	1 Sample	≤ 90 ppm (0.009% by weight) (CPSA – 16 CFR 1303)	
Formaldehyde - Adults & children over 5T	Kohl's TM-5	1 Sample	Negative, If Spot Test is Positive/ inconclusive, proceed with step 2	
	JIS L 1041:2011- Sec. 8.1.3 & 8.1.4 Method A or B		Children <b>over 5T</b> & Adults = 75 ppm max.	
Formaldehyde - Children's 0-5T	JIS L 1041:2011-	1 Sample	Children 0-5T = 20 ppm max.	
*CA Prop 65 (if applicable)	Refer to Protocol 1300	All Samples	All samples shall be reviewed against the requirements of California Proposition 65 to determine if additional testing or labeling is required.	
*PFAS Supplemental Protocol	Refer to Protocol 1600	All Samples	All samples shall be reviewed against the requirements of PFAS Supplement Protocol to determine if additional testing or labeling is required	
<b>Physical Characteristics</b>				
Overall Dimension	Standard Measure (in/cm)	3 Samples	Max. +5% / -0% of claimed dimension.	Claim:
Overall Weight	Standard Measure (lb/kg)	3 Samples	Max. +5% / -0% of claimed weight. Record actual data if there is no claim.	Claim: Actual:
Fabric Weight (Oz. / Sq. Yd.)	ASTM D3776	1 Sample	As approved / as claimed / products specifications/as measured (+5% / -0%)	Claim: Actual:
Fabric Count	ASTM D 3775/ ASTM 3887/	1 Sample	As approved / as claimed / products specifications/as measured	Claim:
Yarn Size	ASTM D 1059	1 Sample	For fabric: Report actual or as per specification	
<b>Construction Qualities</b>				
Kohl's Workmanship Review	Visual Check / Actual Use	All Samples	<ul style="list-style-type: none"> <li>-All components shall be provided as claimed and shall not be deformed or fractured.</li> <li>-All hardware shall be provided</li> <li>-All welds shall be smoothly finished and free from pits and splatter</li> <li>-All components shall not contain any burs or sharp edges (test by touch or sight)</li> <li>-Product shall not contain any loose components or unsecured fastening where rigidity is required</li> <li>-Filling material shall be free of objectionable matter and contaminants</li> </ul>	

Performance				
General Safety	EN 1725 Section 6	1 Sample	Components or parts of bed which the user may come into contact during normal use shall not have burrs and/or sharp edges and open-ended tubes. - During normal use, all accessible moving mechanisms between two parts moving relative to each other shall have a distance $\leq 8$ mm or $\geq 25$ mm. - Feet that may be trapped by a moving part, the distance of that part from floor shall be $\geq 100$ mm.	
Static Distributed Load Test	Actual Use	1 Sample	Hammock shall have no failure after subjected to the claimed maximum load for 30 minutes. The load shall be evenly distributed over the bed area as much as possible. If no such claim, apply the following load: - Single: 300 lbs.	
Impact Durability	Actual Use	1 Sample	For 1 person hammock: No failure when a test load of 225 lbs. is dropped freely from 6 inch height onto one side of hammock with no static load on another side. For 2 person hammock: No failure when a test load of 225 lbs. is dropped freely from 6 inch height onto one side of hammock with 400 lbs. static load on another side.	
Functionality	Actual Use	1 Sample	Shall function as intended as received.	
Assembly	Actual Use	All Samples	Shall be assembled as instructed or intended without any adverse findings obstructing assembly.	
Cycle Test (for operable components)	Actual Use	All Samples	Operable component shall withstand 100 times actual use cycles without failure or loss of functionality	
*Effects Of Extreme Temperature/Humidity (For Outdoor Use Only)	Kohl's TM 30	1 Sample	24 Hours @ 0° F (-18°C) and 24 Hours @ 95% RH/120° F (49°C) - no failure. Size limitation to be determined.	
*Wood Moisture Content	Std. Measure	1 Sample	Should be between 6-10% for solid wood only	
*Resistance To Corrosion (Metal components Only)	ASTM B117 G85 (Mod.)	1 Sample	Shall withstand 24 hours in 5% salt spray (fog) with no major visual change or corrosion. Modification = % of salt spray	
Flammability of Solid	16 CFR	1 Sample	Burn rate $< 0.1$ " / sec	
Performance				
Fabric				
Tensile Strength	ASTM D5034	1 Sample	For fabric: Report actual or as per specification	
Tear Strength	ASTM D1424	1 Sample	For fabric: Report actual or as per specification	
Seam Strength	ASTM D1683	1 Sample	Min. 60 lbs. / in.	
Seam Slippage	ASTM D1683	1 Sample	Min. 50 lbs @ $\frac{1}{4}$ in slippage	
Colorfastness to Dry Crocking	AATCC 8/116	1 Sample	Min. Class 4.0	
Colorfastness to Wet Crocking	AATCC 8/116	1 Sample	Min. Class 3.0	
Colorfastness to Chlorine Bleach And Non-	AATCC/ASTM TS-001	1 Sample	Min. Class 4.0 (Shade change)	
*Colorfastness to Light Fading (For Outdoor Use Only)	AATCC TM 16.3 Option 3	1 Sample	Min Class 3.5. Report actual data at 20/40/60 hrs.	
*Colorfastness to Perspiration	AATCC 15	1 Sample	Shade Change: Grade 4 min. Self Staining: Grade 4 min. Multi-fiber Staining: Grade 4 min.	
*Colorfastness to Water	AATCC 107	1 Sample	Color Change: Grade 4 min. Color Staining: Grade 3 min.	

Protocol Version	Description of Change	Revised by / Date	Approved By / Date
431-A	1) Initial Release	Charlene Swanson / August 2021	Charlene Swanson / August 2021
431-B	1) Added PFAs/PFOs Supplement Requirement	Charlene Swanson / March 2022	Charlene Swanson / March 2022