


PROTOCOL # 824 - O

TRAVEL MUG

Performance Test	Test Method	Samples	Test Principle/Requirements	Rating (Section or exec. Summary which failed items can be referenced)
LABELING				
Labeling / Packaging Review	FPLA 16 CFR 500 & 19 CFR 134	All Samples	Shall 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 (if applicable) -Country of origin (if imported)	
Verify Label Claims	Visual Check/ Performance Claims	All Samples	The labeling must be valid and comply with all claims.	Claim: Actual:
Adult Tracking Label **If space limitations exist, contact Kohl's Quality Assurance & Product Integrity teams to discuss minimum required information (quality.assurance@kohls.com)	Kohl's Requirement	All Samples	Can be included on packaging when necessary: Kohl's Assigned Factory Number Manufacture Date (Month/Year) UPC #	
Capacity (If Applicable)	FPLA/ UPLR	3 Samples	Max. +3% / -0% of claimed capacity. For measuring cups or spoons only: Max. -0%/+5% of claimed capacity. Record actual data if there is no claim.	Claim: Actual:
Capacity (fl. oz. / mL)	FPLA/ UPLR	3 Samples	As claimed/ measured (+3%/ -0%)	Claim: Actual:
Dimensions	FPLA/ UPLR	3 Samples	As claimed/ measured (+3% / -0%)	Claim: Actual:

Chemical Disclosure / Labeling in Cookware	CA AB-1200 article 2 (mod) / CO HB-22 1345 sec. 25-15-604 (2)a-f (mod)/ Visual	All Samples	<p>Cookware chemical disclosure labeling provided for CA AB-1200 and/or CO HB-22-1345 compliance pertaining to handles or any surface that comes into contact with food, foodstuff, or beverages shall meet the following:</p> <p>1) List of chemicals is introduced by the phrase ""The product contains: ""</p> <p>2) List of chemicals is followed by the phrase ""For more information about chemicals in this product, visit: / Para obtener más información sobre las sustancias químicas de este producto, visite: ""www.kohls.com/chemicaldisclosure"" and QR code which leads to that web address</p> <p>3) Lab must verify that all disclosed chemicals are present on the Kohl's TRF</p> <p>4) Labeling must be incorporated into retail packaging or printed on a sticker / hangtag which is affixed to retail packaging or the product. Fold out ""butterfly"" labels are acceptable. Printing on the inside of retail packaging or an information insert are not acceptable formats</p> <p>See example below:</p> <div data-bbox="781 781 1232 947" style="border: 1px solid black; padding: 5px;"> <p>This Product Contains: (Este producto contiene:) Chemical 1, Chemical 2, Chemical 3, Chemical 4, etc. For more information about chemicals in this product, visit: (Para obtener más información sobre las sustancias químicas de este producto, visite:) https://cs.kohls.com/app/answers/detail/a_id/4243?cid=ISMQR246&utm_medium=ISM</p>  </div>	
CONSTRUCTION QUALITIES				
Kohl's Workmanship Review	Visual Check /Actual Use	1 Sample	<p>All components shall be provided as claimed and shall not be deformed or fractured.</p> <p>All hardware shall be provided</p> <p>All welds shall be smoothly finished and free from pits and splatter</p> <p>All components shall not contain any burrs or sharp edges (test by touch or sight)</p> <p>Product shall not contain any loose components or unsecured fastening where rigidity is required</p>	
PERFORMANCE TESTING				
Handle Strength (If Applicable)	Kohl's TM 34	1 Sample	Min. 10 lbs. static load (less than 1000 ml.) Min. 20 lbs. static load (greater than 1000 ml.)	
Lid Fitting (If Applicable)	Actual Use	1 Sample	No failure–100 cycles on / off.	
Effects Of Extreme Temperature (Environmental)	Kohl's TM 30	3 Samples	<p>Tier 1 : 24 Hours @ 30° F (1.1°C) and 24 Hours @ 100° F (37.7°C) - no failure.</p> <p>Tier 2 : 48 Hours @ 0° F (-18°C) and 48 Hours @ 120° F (49°C) - no failure.</p>	
Effects Of Handwashing	Kohl's TM 32	1 Sample	<p>No color change and no adverse effects – Hand wash with detergent for below defined cycles.</p> <p>Tier 1: 5 cycles Tier 2: 15 cycles</p>	
*Dishwashing Test (If Claimed)	Kohl's TM 57	1 Sample	<p>Dishwasher / detergent below defined cycles - no color change or adverse effects. Report if label is not durably marked.</p> <p>Tier 1: 5 cycles Tier 2: 15 cycles</p>	

Stain Resistance	Actual Use	3 Samples	No objectionable stain by beverage after 2 hours placement: red wine, coke, orange juice and grape juice. No objectionable stain after below timing placement: - Red wine, coke, orange juice & grape juice Tier 1: 1 Hour Tier 2: 4 Hours
Lid securement	Actual Use	1 Sample	Fill tumbler to within 1cm of lid with water. Secure lid on the tumbler body. Invert over a white paper towel or other material that will show signs of leakage, keep inverted for 30 seconds. Lid should remain secure with no leakage or lid removal.
Leakage (Test At As Received Condition And After 5 Cycles Of Dishwashing/ Handwashing)	Actual Use	1 Sample	Fill the container to its nominal capacity with water containing 0.5% of a surfactant at ambient temperature and lie the container on its side. No drops of water shall escape from the closure within 5 min Note: Tier 1 : Test On it's side (90 degrees) for 3 minute sand 135 degrees for 1 minute Tier 2 : Test on it's side (90 degrees) for 5 minutes and 135 degrees for 5 minutes
Stability	Actual Use	1 Sample	The sample shall not overbalance when placed on a plane included at 10° to the horizontal in any orientation and at any level of filling from empty up to, and including, its nominal capacity.
Thermal Shock	With Reference to ASTM C149	1 Sample	Fill the sample to its nominal capacity with water at temperature T1 as specified below. Leave for 5 min, empty, and immediately refill to its nominal capacity with water at temperature T2 as specified below for 5 min. Empty, and check if the filler is still intact. The container shall not be damaged. Tier 1 T1(°C) (15 ± 2) T2 (°C) (85 ± 2) Tier 2 T1(°C) (0 ± 2) T2 (°C) (95 ± 2)
Thermal Retention - Cold	With Reference to EN 12546-1	1 Sample	Fill sample with water at 5°C. Start recording the temperature and measure the temperature every 15 minutes until it rises to 15°C. Report the initial and final temperature as well as capacity of the sample. Include the data generated over the time duration in the report. The time elapsed from 5°C to 15°C shall be as below. Tier 1: 3 Hours Tier 2: 8 Hours
Thermal Retention - Cold	With Reference to EN 12546-1	1 Sample	Preheat the container for (5 + 1) min by filling it to its nominal capacity with hot water at > 95°C. Then empty the container and immediately fill it to its nominal capacity with water at > 95°C. Apply the cover. After leaving the container for 6 h + 5 min at a temperature of (20 + 2) °C, check the water temperature. The water temperature after the 6 h shall be as below. Water Temperature After 6h + 5min Tier 1: ≥ 50°C Tier 2: ≥ 80°C

Impact Test (Drop)	With Reference to EN 12546-1	1 Sample	At room temperature, fill the container with water to its full capacity and allow it to drop the no. of times mentioned below from below specific height onto a concrete floor: Once on the bottom and twice on the sides, changing the impact point each time. Requirement: The top shall not pop off and contents of the sample shall not spill. Note: Dents, Dings, Scratches and minimal breakage of plastics are acceptable Tier 1: 3 Drops/ 3 feet Tier 2: 5 Drops / 4 feet	
Cross Cut Adhesion (Paint and Coating on metal parts) (if applicable)	ASTM D3359 1 Sample A lattice pattern with six cuts in each direction Method B	1 Sample	A lattice pattern with six cuts in each direction is made in the film to the substrate, pressure- sensitive tape is applied over the lattice and then removed. Client's Requirement: Tier 1: 3B; Tier 2: 5B;	
ANALYTICAL				
*Toxicology (Plastics and polymeric coating)	21 CFR 175/177	1 Sample	Must comply with applicable requirements of FDA.	
*Lead In Scrapable Surface Coating	ASTM E1613/E1645	1 Sample	≤90 ppm (0.009% by weight). (CPSA – 16 CFR 1303)	
*Bisphenol A (BPA) Content Scope: 1) Reusable food or beverage containers (ie, food contact), including lid, cup, etc). 2) Sports bottles	Solvent extraction and analysis by LC/MS Various US State Laws (CT, WA, NY, DE, IL, MA, MD, ME, MN, NV, VT, WI, the District of Columbia, Chicago City)	All Samples & All Colorways	Shall not contain any detectable level of Bisphenol A Remark: Actual testing shall be done on all accessible plasticized material including coatings and plastic. Exempt Materials: Glass, Metal, Wood, Textiles. Plastic layer or coating on exempt material shall need to be tested. Vendor shall be responsible for compliance of other materials.	
CA Prop 65	Refer to Protocol 1300	1 Sample	All samples shall be reviewed against the requirements of California Proposition 65 to determine if additional testing or labeling is required	
PFAS Supplemental Protocol (1600)	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	
Food Contact Supplemental Protocol (State Regulations Only)	Refer to Protocol 1800	All Samples	All samples shall be reviewed against the requirements of Food Contact Supplemental Protocol (State Regulation Only) to determine if additional testing or labeling is required	
STAINLESS STEEL (IF CLAIMED & FOOD CONTACT ONLY)				
Claimed Chromium Content < 16%				
* Stainless Steel Composition (Applicable To Food Contact Surfaces Only)	Acid Digestion / ICP / ASTM E1019	1 Sample	Stainless steel composition (Carbon, Manganese, Phosphorus, Sulfur, Silicon, Chromium, Nickel, Nitrogen, Molybdenum) test is to be conducted.	
* Stainless Steel - Resistance To Corrosion (Applicable if result of composition test does not meet the claimed specification)	ASTM B117 (Mod.)	1 Sample	Shall withstand 48 Hours in 1% Salt Spray (Fog) with no major visual change, pitting or corrosion. Modification = Change of % Salt Spray	
Claimed Chromium Content > 16%				
*FDA – GRAS Stainless Steel (Applicable To Food Contact Surfaces Only)	Acid Digestion / ICP / ASTM E1019	1 Sample	Shall meet Stainless Steel Claim (Chromium and Nickel content) AND Minimum of 16% Chromium to be considered FDA GRAS.	
GRAS evaluation	FDA Generally Recognized as Safe (GRAS) Guidelines/FDA Opinion / ASTM E1086-14 / ASTM E415-17 / CPSD-GB-00003-MTHD / CPSD-AN-00295-MTHD		Metal intended to come into contact with food shall meet FDA GRAS requirement. Metal composition is conducted and evaluated if it is GRAS. Must meet 16% Chromium, if not conduct stainless steel - resistance to corrosion testing	

* Stainless Steel - Resistance To Corrosion (Applicable if product does not comply GRAS test)	ASTM B117 (Mod.)	1 Sample	Shall withstand 48 Hours in 1% Salt Spray (Fog) with no major visual change, pitting or corrosion. Modification = Change of % Salt Spray	
PFAS Supplemental Protocol (1600)	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	

OTHER METAL (FOOD CONTACT ONLY)

* Leachable lead (Applicable to food contact metal only)	ASTM C738 / AOAC methods 973.32 and 973.82	1 Sample	With reference to CPG Sec. 545.500 (CPG 7117.05) Lead: ≤ 7.0 µg/mL, average of 6 units (product intended for adult) ≤ 0.5 µg/mL, all 6 units (product intended for infants and children)	
PFAS Supplemental Protocol (1600)	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	

PRICING AND ADDITIONAL NOTE:
***Please refer to Kohl's preferred third party labs for individual pricing and sample size.**
In addition to this protocol, any products designed for, intended for or appeal primarily to children, requires additional testing per Kohl's Testing Protocol #601.

PROTOCOL VERSION	DESCRIPTION OF CHANGE	Revised By	Approved By
824- A	Initial Release	John Wong Mar 20, 2013	Rufus Kay Moberly Jul 23, 2013
824 - B	Updated Requirements of Tier 1/ Tier 2/ Tier 3 (Thermal Shock, Thermal Retention – Hot, Thermal Retention – Cold) Updated the package price & working days	Jeetendra Shelatkar Oct 4, 2013	Ro Jain Dec 16, 2013
824 - C	Updated lead content and resistance to corrosion test pricing	Candy Chan Jul 30, 2014	Jeetendra Shelatkar Aug. 4, 2014
824 - D	Renamed all in-house methods	Candy Chan Sep. 4, 2014	Elaine Smaczniak October 30, 2014
824 - E	Added Cross Cut Adhesion	Zoe Yeung Mar 17, 2015	Elizabeth Armstrong March 19, 2015
824-F	Updated BPA testing to test all accessible components if BPA Free is claimed	Elizabeth Armstrong July 30, 2015	Elizabeth Armstrong July 30, 2015
824-G	Added Heat Transfer Test, Leachable Lead for Other Metals (Food Contact Only) Updated Cross Cut Adhesion (Paint and Coating on Metal parts) , Toxicology (Plastics and polymeric coating) and BPA Content	Gigi Au May 24, 2016	Elizabeth Armstrong May 24, 2016
824-H	Added Lid securement test line	Elizabeth Armstrong March 1, 2018	Elizabeth Armstrong March 1, 2018
824-I	Updated GRAS evaluation	Teana Robinette Sept 25, 2018	Teana Robinette Sept 25, 2018
824-J	Updated GRAS evaluation for s/s composition	Elizabeth Armstrong Jan 14, 2019	Elizabeth Armstrong Jan 14, 2019
824-K	Added adult tracking label	Elizabeth Armstrong June 24, 2020	Elizabeth Armstrong June 24, 2020
824-I	Added supplemental testing line and removed tier 3	Elizabeth Armstrong March 2022	Elizabeth Armstrong March 2022
824-M	Updated BPA Content test line	Violet Nelson / Oct. 2023	
824-N	1) Added Chemical Disclosure / Labeling in Cookware test line	Violet Nelson / Dec 2023	
824-O	1) Added new Food Contact Supplemental protocol (1800) requirements	Jackie Deppisch September 2024	