


PROTOCOL # 819.3-Y				
Cookware-Cast Iron				
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)	
Care And Use Instructions	CMA Engineering Standards Clause 6.5.1	All Samples	Preparation recommendations before initial use (for non-stick coatings, etc.) Maximum oven use temperature (for plastic handle) Surface cleaning and caring advice Advice on tightening of handle fixture Information to avoid misuse of abrasive pad and cleaner Warranty information (if applicable)	
Markings	CMA Standards Chapter 2	All Samples	Measurements of top-of-range cooking utensils & bakeware shall be marked permanently or with temporary labels.	
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 #	

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> <p>This Product Contains: (Este producto contiene:) Chemical 1, Chemical 2, Chemical 3, Chemical 4, etc.</p> <p>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>	
PHYSICAL CHARACTERISTICS				
Capacity (fl. oz. / mL)	FPLA/ UPLR	3 Samples	As claimed/ measured (+3%/ -0%)	Claim: Actual:
Size	FPLA/ UPLR	3 Samples	As claimed/ measured (+3%/ -0%)	Claim: Actual:
Flatness Of Pots & Pans Bottoms	CMA Standards	All Samples	Flatness on all contact surfaces should be +/- 0.0625" (1.6mm).	
Handle Position On Cookware with Stick	CMA Standards	1 Sample	The handle shall have a minimum clearance of 1-3/16" (30mm) above the base.	
CONSTRUCTION & WORKMANSHIP				
Kohl's Workmanship Review	Visual Check / Actual Use	1 Sample	All components shall be provided as claimed and shall not be deformed or	
PERFORMANCE				
Oven Safe (If Claimed)	Temperature	1 Sample	Place empty in preheated 350° F (177° C) oven, (include lid), remove @ 1 hour, cool.	
Thermal Conductivity (Dry)	Std. Measure	1 Sample	All points on cooking surface shall be within + 25°F (+ 14°C) when removed from heat	
*Dry Boil Test (Applicable To Utensil With	CMA Standards	1 Sample	No separation of the base or molten metal escaping from the base.	
*Thermal Shock Resistance (Applicable To Glass Cover	CMA Standards	1 Sample	Shall not have cracks, chips or faults that could cause the part to break or fractured.	
			Dishwasher / detergent below defined cycles - no color change or adverse effects.	

Dishwasher Safe (If Claimed)	Kohl's TM 57	3 Samples	Tier 1	5 cycles	
			Tier 2	10 cycles	
Effects of Handwashing (If Claimed)	Kohl's TM 32	3 Samples	No color change and no adverse effects – Hand wash with detergent for below defined		
			Tier 1	5 cycles	
			Tier 2	10 cycles	
Temperature Of Grip While Boiling Water (Stove Top)	Std. Measure	1 Sample	Shall be less than 190°F (88°C) unless handle warning is provided		
Warping (Cookie Sheets, Muffin Sheets, etc)	Actual Use	1 Sample	No visible warping at below defined temperature 400° F (205° C) in oven test as		
			Tier 1	350° F (177° C)	
			Tier 2	400° F (205° C)	
Stain Resistance	Actual Use	1 Sample	No objectionable stain after below timing placement:		
			Tier 1	1 hour	
			Tier 2	2 hours	
Cleanability	Visual Check	1 Sample	Bring tomato sauce (25-50% of the capacity) to boil and let simmer over low heat for 30		
			Tier 1	3 times	
			Tier 2	4 times	
PERFORMANCE - HANDLE ASSEMBLY AND FITTINGS					
Assembly Strength (Stick Handle / Single Handle Pans)	CMA Standards Clause 3.3.1 (Mod.)	1 Sample	Shall support 8.8 lbs. (4kg) weight or below weight for 1 minute in cold & hot conditions		
			Tier 1	1.5 times volume capacity weight	
			Tier 2	2 times volume capacity weight	
Assemblies Strength (Side Handle / Stick Handles With Helper Handles)	CMA Standards Clause 3.3.2 (Mod.)	1 Sample	Shall support the below weight for 1 minute in cold & hot conditions without fracture		
			Tier 1	1.5 times volume capacity weight	
			Tier 2	2 times volume capacity weight	
Torque Resistance (Applicable To Stick Handle Pan Only)	CMA Standards Clause 3.3.3 (Mod.)	1 Sample	Shall resist a torque of 40 inch without causing greater than below degree deflection		
			Tier 1	10 degrees	
			Tier 2	8 degrees	
Handle Fatigue Resistance	CMA Standards Clause 3.3.5 (Mod.)	1 Sample	The handle and its fixing shall resist 15,000 cycles of lifting and lowering under below		
			Tier 1	1.5 times volume capacity weight	
			Tier 2	2 times volume capacity weight	
			For cooking vessels of 12 quarts and larger with welded, riveted or fixture side handles, in		
Strength Test (Applicable To Plastic)	CMA Standards	1 Sample	The measured flexural strength shall be reported		
Flame / Softening test (Applicable To	CMA Standards	1 Sample	The sample shall withstand 1” Bunsen burner without softening or becoming sticky		

Knob Assemblies	CMA Standards	1 Sample	Knob shall withstand 350°F for 1 hour or the recommended use temperature without		
Impact Resistance (Lid Knob/Handle)	EN 12983 Clause 8.1.4	1 Sample	The exterior enamel shall resist a minimum Impact of 20N, showing no damage greater		
PERFORMANCE NON STICK COATING					
*Abrasion Resistance Test	CMA Standards	1 Sample	The test time needed to exposure an area of 1/2 square inch of substrate in the test area		
*Scratch Resistance	CMA Standards	1 Sample	The pressure needed to remove □ 90% of the scratch line shall be reported.		
*Cold Slip Angle	CMA Standards	1 Sample	4-10□□□ Silicone 5-15□□□ PTFE		
*Resistance To Chemical Attack	CMA Standards	5 Samples	Soak test: No color change, cloudiness, loss of adhesion or exposure of substrate.		
*Egg Test	CMA Standards	1 Sample	There shall be no trace of solid material after frying an egg without fat or oil at 300°F to		
*Adhesion Resistance To Burnt Milk	CMA Standards	1 Sample	There shall be complete removal of film material after evaporating and carbonizing 1		
PERFORMANCE- NON STICK BAKEWARE COATINGS					
*Barbeque Chicken Roasting Test	CMA Standards	1 Sample	Release property: Meat can be easily removed from pan		
*Baked Goods Release Test	CMA Standards Clause 21.3.2	1 Sample	The rating of the baked goods release shall be reported		
			Tier 1	75%	
			Tier 2	90%	
ANALYTICAL					
*Lead In Scrapable Surface Coating	ASTM E1613/E1645	1 Sample	≤90 ppm (0.009% by weight). (CPSA – 16CFR 1303)		
*Toxicology (Plastics and polymeric coating)	21 CFR 175/177	1 Sample	Must comply with applicable requirements of FDA		
*Bisphenol A (BPA) Content	Solvent extraction and	All Samples & All Colorways	Shall not contain any detectable level of Bisphenol A		
* CA Prop 65	Refer to Protocol 1300	All Samples	All samples shall be reviewed against the requirements of California Proposition 65 to		
*Leachable Lead And Cadmium On Food Contact	AOAC 973.32 ASTM C738	6 Samples	Pb: □ 1.0 ppm (large hollowware) □ 2.0 ppm (small hollowware)		
*PFAS Supplemental Protocol (1600)	Refer to Protocol 1600	All Samples	All samples shall be reviewed against the requirements of PFAS Supplement Protocol to		
Total Lead	Metal: CPSC-CH-E1001-08.3	1 Sample	90ppm Minnesota 325E.3892 (HF 2310)		
Total Cadmium	Substrate & Surface Coating:	1 Sample	40ppm (children) Washington State CHCC		
Total Cadmium	Substrate & Surface Coating:	1 Sample	75ppm Minnesota 325E.3892 (HF 2310)		
Refer to protocol Hardlines Regulatory Supplement for	Refer to Protocol 1800	All Samples	All samples shall be reviewed against the requirements of the Hardlines Regulatory		
STAINLESS STEEL (IF CLAIMED & FOOD CONTACT ONLY)					
Claimed Chromium Content < 16%					
* Stainless Steel Composition	Acid Digestion /	1 Sample	Stainless steel composition (Carbon, Manganese, Phosphorus, Sulfur, Silicon,		
* Stainless Steel - Resistance To Corrosion	ASTM B117 (Mod.)	1 Sample	Shall withstand 48 Hours in 1% Salt Spray (Fog) with no major visual change, pitting or		
Claimed Chromium Content ≥ 16%					
*FDA – GRAS Stainless Steel	Acid Digestion /	1 Sample	Shall meet Stainless Steel Claim (Chromium and		

*Stainless Steel - Resistance To Corrosion	ASTM B117 (Mod.)	1 Sample	Shall withstand 48 Hours in 1% Salt Spray (Fog) with no major visual change, pitting	
*GRAS evaluation	FDA Generally Recognized as	1 Sample	Metal intended to come into contact with food shall meet FDA GRAS requirement.	

CAST IRON WITH ENAMEL

PERFORMANCE

*Thermal Shock Resistance (Applicable To Glass Cover)	CMA Standards	1 Sample	Shall not have cracks, chips or faults that could cause the part to break or fractured.	
*Thermal Shock Resistance (Applicable To Porcelain Enamel Finishes On Steel And Iron Only)	CMA Standards Clause 17.2.3 ASTM C 385 (Mod.)	1 Sample	Shall have an average rating of below defined cycles.	
			Tier 1	Tier 2
			Multi-Coated 3 Cycles	5 cycles
			Single Coated 7 cycles	10 cycles
*Surface Durability (Applicable To Porcelain)	CMA Standards	Varies	Aluminum Cookware Acid solubility<15 mg/sq. inch	

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 appealing primarily to children, requires additional testing per Kohl's Testing Protocol # 601

PROTOCOL VERSION	DESCRIPTION OF CHANGE	Revised By	Approved By
819-0	Initial Release	Simon Leung Oct. 31, 2008	Ro Jain Oct. 31, 2008
819-A	Changed protocol number from 819-0 to 819-A. Changed lead	Elizabeth Armstrong	Ro Jain April 1, 2010
819-B	Added BPA Testing	Elizabeth Armstrong	Ro Jain November 11,
819.3-C	1. Added Oven Safe Test. 2. Added Thermal Conductivity (Dry) Test.	Elaine Smaczniak Sep 18, 2012	Ro Jain Oct 4, 2012
819.3-D	FDA – GRAS Stainless Steel Test, Handle Fatigue Resistance & Dry Boil Test Updated.	John Wong Dec 21, 2012	Rufus Moberly Jan 29, 2013
819.3-E	Separate the test line of Prop 65 to supplementary protocol Updated CMA Tests.	John Wong Jul 18, 2013	Rufus Moberly Jul 23, 2013
819.3-F	Differentiate the performance rating to Tier 1/Tier 2/Tier 3 Updated the package price & working days	Jeetendra Shelatkar	Ro Jain Dec 16, 2013
819.3-G	Updated lead content and resistance to corrosion tests pricing	Candy Chan Jul 30, 2014	Jeetendra Shelatkar
819.3-H	Renamed in-house methods	Birkoff Chen Sep. 4, 2014	Elaine Smaczniak
819.3-I	Updated BPA testing to test all accessible components if BPA	Elizabeth Armstrong	Elizabeth Armstrong
819.3-J	Added Leachable Lead for Other Metals (Food Contact Only)	Gigi Au May 23, 2016	Elizabeth Armstrong
819.3-K	Updated Impact resistance testing method	Elizabeth Armstrong	Elizabeth Armstrong
819.3-L	Updated GRAS Evaluation	Teana Robinette	Teana Robinette
819.3-M	Updated GRAS evaluation for s/s composition	Elizabeth Armstrong	Elizabeth Armstrong
819.3-N	Added POTS to bottom flatness test	Elizabeth Armstrong	Elizabeth Armstrong
819.3-O	Added adult tracking label	Elizabeth Armstrong	Elizabeth Armstrong
819.3-P	Added Resistance To Scratching on Cooking Surfaces	Elizabeth Armstrong	Elizabeth Armstrong
819.3-Q	Removed Resistance To Scratching on Cooking Surfaces	Elizabeth Armstrong	Elizabeth Armstrong

819.3-R	Added PFAS and updated tiering	Jackie Deppisch March 2022	Jackie Deppisch March 2022
819.3-S	Removed *PTFE Identification (Non-Stick Coating)	Elizabeth Armstrong June 2022	
819.3-T	Updated BPA Content test line	Violet Nelson / Oct. 2023	
819.3-U	Added test lines Total Lead & Total Cadmium (Adults & Childrens)	Violet Nelson / Nov. 2023	
819.3-V	1) Added Chemical Disclosure / Labeling in Cookware test line	Violet Nelson / Dec 2023	
819.3-W	Updated MN Law to include exemptions	Elizabeth Armstrong March 2024	
819.3-X	1) Added new Food Contact Supplemental protocol (1800) requirements	Jackie Deppisch September 2024	
819.3-Y	Updated 1800 Hardlines Regulatory Supplement for additional State & Federal Regulations	Isaac Grossman/Feb 2025	