

## SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

### Mutual Cornell

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### TESTING

Valid to: **August 4, 2023**

Certificate Number: **AT-1404**

#### Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Total Arsenic Total Cadmium Total Chromium Total Cobalt Total Lead Total Mercury Total Nickel	CPSC-CH-E1001-08 CPSC-CH-E1002-08.1 CPSC-CH-E1003-09 16 CFR Part 1303 IEC 62321 Ed. 1	Total Metals in Metal & Non-Metal (Paint, Crystal, Ceramic, Siliceous & Other Similar Surface Coatings) in Adult, Children's & Electrotechnical Products	Inductively Coupled Plasma / Optical Emission Spectrometer
Total Cadmium Total Lead	USEPA 3050B USEPA 3051A USEPA 3052	Total Metals in Metal & Non-Metal (Paint, Crystal, Ceramic, Siliceous & Other Similar Surface Coatings) in Adult & Children's Products	Atomic Absorption Spectrometer
Total Bromine Total Cadmium Total Chromium Total Lead Total Mercury	CPSC-CH-E1002-08.1 IEC 62321 Ed. 1	Total Metals in Plastics in Adult, Children's & Electrotechnical Products	X-Ray Fluoroscope (XRF)
DEHP, DBP, DNOP, DIDP, DINP, BBP, DnHP, DIBP, DNPP, DAP, DCHP	CPSC-CH-C1001-09.4	Determination of Phthalates in Adult and Children's Products (Including Toys and Jewelry)	Gas Chromatograph / Mass Spectrometer
Soluble (Leachable) Cadmium	CPSC-CH-E1004-11	Soluble (Leachable) Cadmium Extractability from Children's Metal Jewelry	Inductively Coupled Plasma / Optical Emission Spectrometer

## Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Soluble (Leachable) Antimony, Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, and Selenium	ASTM F963-16/F963-17(4.3.5.2) ASTM F963-16/F963-17(4.3.5.1(2)) ASTM F963-16/F963-17(4.3.5.2) BS EN 71-3	Migration of Certain Elements in Adult and Children's Products (Including Toys and Jewelry)	Inductively Coupled Plasma / Optical Emission Spectrometer
Test method for release of nickel from all articles intended to come into direct and prolonged contact with the skin.	EN 12472 (Wear) EN 1811 (Analytical)	Jewelry and Other Items	Inductively Coupled Plasma / Optical Emission Spectrometer
Bisphenol-A (BPA)	In-house test method	Plastics	Gas Chromatograph / Mass Spectrometer
Hexavalent Chromium (Cr VI)  (Spot Test & Extraction Methods)	IEC 62321	Electrotechnical Products	Chemical Indicator (1,5diphenylcarbazine)  UV / Visible Spectrophotometer
Test Method for Lead and Cadmium Extracted From Glazed Ceramic Surfaces	A STM C738-94-16	Glazed Ceramic Surfaces	Inductively Coupled Plasma / Optical Emission Spectrometer
Test Method for Lead and Cadmium Extracted from the Lip & Rim of Glass Tumblers Externally Decorated with Ceramic Glass Enamels	ASTM C927-80-14	Glazed Ceramic Surfaces	Inductively Coupled Plasma / Optical Emission Spectrometer

## Chemical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Energy dispersive X-ray fluorescence (EDXRF) for detection and quantification of lead in paint layers, similar coatings, or substrates and homogenous materials.	ASTM F2853-10	Children's Product (Including Toys, Jewelry, and Other Articles)	Energy Dispersive X-ray fluoroscope (EDXRF)
Test Methods for Consumer Product safety of Children's Jewelry	F-2923-20 CPSC-CH-E1001-08.3 CPSC-CH-E1002.08.3 CPSC-CH-E1003-09.1 16 CFR Part 1303 CPSC-CH-C1001-09.4, CPSC-CH-E1004-11 EN 12472 (Wear) EN 1811 (Analytical) ASTM F963-16/F963-17, CPSC 16 CFR 1500.51-53,	Children's Products (Jewelry)	Inductively Coupled Plasma / Optical Emission Spectrometer  Gas Chromatograph/ Mass Spectrometer

## Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Determination of the ability of a lens to meet basic impact resistance	ANSI Z80.3 CFR 21 Chapter 1, Subchapter H, Part 801.401	Polycarbonate and acrylic sunglass lens	Drop Ball Tester
Sharp points on toys	EN71-1 (8.12) ASTM F963-16/F963-17(4.9) CPSC 16 CFR 1500.48 (9.2.4)	Children's Toys and Other Articles	Sharp Point Tester
Sharp edges on toys	EN71-1 (8.11) ASTM F963-16/F963-17(4.7) CPSC 16 CFR 1500.49 (4.8.2)	Children's Toys and Other Articles	Sharp Edge Tester

## Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Checking accessibility on toys	EN71-1 (8.10) ASTM F963-16/F963-17(4.18) CPSC 16 CFR 1500.49,51-53	Children's Toys and Other Articles	Accessibility Probes
Drop test on toys	EN71-1 (8.5) ASTM F963-16/F963-17(8.7) CPSC 16 CFR 1500.51-53	Children's Toys and Other Articles	Impact Flooring Medium
Impact test on toys	EN71-1 (8.7)	Children's Toys and Other Articles	1 kg Impact Tester
Checking for small parts	EN71-1 (8.2) ASTM F963-16/F963-17(4.6) CPSC 16 CFR 1501.4 (9.2.6)	Children's Toys and Other Articles	Small Parts Cylinder
Torque force on toys	EN71-1 (8.3) ASTM F963-16/F963-17(8.8) CPSC 16 CFR 1500.51-53	Children's Toys and Other Articles	Torque Test Kit Force Gauge
Tension on toys	EN71-1 (8.4) ASTM F963-16/F963-17(8.9) CPSC 16 CFR 1500.51-53	Children's Toys and Other Articles	Tension Test Kit Force Gauge
Compression on toys	EN71-1 (8.8) ASTM F963-16/F963-17(8.10) CPSC 16 CFR 1500.51-53	Children's Toys and Other Articles	Compression Head Force Gauge
Flexure on wire	EN71-1 (8.13) ASTM F963-16/F963-17(8.12) CPSC 16 CFR 1500.51-53	Children's Toys and Other Articles	Flexure Tester Force Gauge
Testing of small balls	EN71-1 (8.32) ASTM F963-16/F963-17(4.34) CPSC 16 CFR 1500.18(a(17))	Children's Toys and Other Articles	Small Ball Test Fixture

## Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Testing of rattles	EN71-1 (8.16) ASTM F963-16/F963 17(4.23) CPSC 16 CFR Part 1510.4 (11)	Children's Toys and Other Articles	Rattle Test Fixtures Force Gauge
Testing bite on toys	CPSC 16 CFR 1500.51-53	Children's Toys and Other Articles	Bite Test Clamp Force Gauge
Testing of pacifiers	ASTM F963-16/F963-17(4.20) CPSC 16 CFR Part 1511	Children's Toys and Other Articles	Pacifier Test Fixture Force Gauge
Testing of seams on toys	EN71-1 (8.4) ASTM F963-16/F963-17(4.27) CPSC 16 CFR 1500.51-53	Children's Toys and Other Articles	Seam Test Clamp Force Gauge
Cycle testing on toys	CPSC 16 CFR 1500.51-53	Children's Toys and Other Articles	Impact Flooring Medium Flexure Tester Torque Test Kit Tension Test Kit Compression Head Seam Test Clamp Bite Test Clamp Force Gauge
Normal use testing on toys	ASTM F963-16/F963-17(8.5)	Children's Toys and Other Articles	Compression Head Flexure Tester Force Gauge Impact Flooring Medium Tension Test Kit Torque Test Kit
Method for determining extremely flammable and flammable solids	CPSC 16 CFR 1500.44	Mechanical Analysis	Paraffin Candle
Metal Products	ASTM B117-11	Mechanical Environmental	Salt Spray Chamber

Note:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AT -1404.



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