SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

APPLIED TECHNICAL SERVICES, LLC.
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CHEMICAL

Valid To: January 31, 2026 Certificate Number: 1888.02

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following chemical analyses on metals, non-metals, polymers, liquids, toys, children's products, and juvenile furniture:[1]

Test(s):	**Test Method(s):**
Optical Emissions Spectroscopy (OES) (Al, As, B, Be, Bi, C, Ca, Cd, Ce, Co, Cr, Cu, Fe, Ga ,In, Li, Mg, Mn, Mo, N, Na, Nb, Ni, P, Pb, S, Sb, Se, Si, Sn, Sr, Ta, Te, Ti, V, W, Zn, Zr)	ASTM E415, E1086, E1251, E3047
X-Ray Fluorescence (ED-XRF) (Ag, Al, Bi, Co, Cr, Cu, Fe, Mn, Mo, Nb, Ni, Pb, Pd, Sb, Se, Sn, Ti, V, W, Zn, Zr)	ASTM E1476 (Section 7.1)
X-Ray Fluorescence (WD-XRF, Wave Length Dispersive)	ASTM E572, E1085, E1621, E2465
Combustion (S, C, N, O, H)	ASTM E1019, E1447, E1409, E1941
SEM/EDS	ASTM E1508
X-Ray Diffraction (XRD)	ATS-962; ASTM D934
Inductively Coupled Plasma (ICP) (Ag, Al, Ar, As, Au, B, Ba, Be, Bi, Br, Ca, Cd, Ce, Cl, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Hg, Ho, I, In, Ir, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, Os, P, Pb, Pd, Pr, Pt, Pu, Rb, Re, Rh, Ru, S, Sb, Sc, Se, Si, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn, Zr)	ASTM E1479
Lead by Inductively Coupled Plasma (ICP)	ASTM E1613 (Withdrawn in 2021)
Soluble Metals	ASTM F963-17 (Section 4.3.5.2 and Section 8.3)
Determining Lead Content in Substrates or Children's Toys	ASTM E1479 or E1613 (Withdrawn in 2021); ASTM F963-17 (Section 8.3 or ASTM E1645)
Surface Coating Materials – Soluble Test for Metals	ASTM F963-17 (Section 4.3.5.1(2))
Toy Substrate Materials	ASTM F963-17 (Section 4.3.5.2)
Determining Total Lead in Paint and Other Similar Surface Coatings	16 CFR 1303 using CPSC-CH-E1003-09

Test(s):	**Test Method(s):**
Determining Total Lead in Children's Metal Products, including Children's Metal Jewelry	CPSC-CH-E1001-08
Determining Total Lead in Non-Metal Children's Products	CPSC-CH-E1002-08
Standard Operating Procedures for Determining Phthalates (DnBP, DnHP, DnOP, BBP, DEHP, DIBP, DiDP, DINP, DCHP, DPENP, DMIP, DPIP)	CPSC-CH-C1001-09.4
Analysis of Bisphenol A (BPA) by LC/MS/MS	ATS 367
Organic Emissions of Non-Metallic Materials for Automobile (Marks Instrumentation)	VDA 278
Determination of Volatile and Semi-Volatile Organic Compounds from Vehicle Interior Materials	GMW 15634
Determination of Aldehyde and Ketone Emissions	GMW 15635
Substances of Concern Materials and Components Constituents and Emissions	BMW GS 93008-4
Substances of Concern Prohibited and Declarable Substances in Materials and Components	GS 93008-1, GS 93008-2 (As it pertains to VDA 278)
Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings	EPA 24, includes: ASTM D1475, ASTM D2369, ASTM D4017, ASTM D4457
Toyota Engineering: Substances of Concern Materials and Components Constituents and Emissions	TSM 0508G
Non-Metallic Materials in Automotive Interior Trim; Determination of Emission of Organic Compounds	PV 3341
Polymer Materials; Measuring Emissions of Formaldehyde	PV 3925
Sample Preparation and Chemical Characterization of Medical Device Materials	ISO 10993-12, ISO 10993-18
DSC	ASTM D3418, E1356, E793, E794
DMA	ASTM D5023, D5026, D5418, D4065, E1640
TGA	ASTM E1131, E1641, E1868
TMA	ASTM E1545, E831
FTIR	ASTM E1252
Ion Chromatography (IC)	ASTM D4327
Specific Gravity / Density	ASTM D792 (Method A); ISO 1183-1
Brookfield Viscometer	ASTM D2196
Electrical Conductivity of Solutions	ASTM D1125
Capillary Viscometers	ASTM D445, D446
pH	ASTM E70
Wet Chemistry	ASTM D808, D512

[1] The Consumer Product Safety Improvement Act (CPSIA) requires that every children's product subject to a federal consumer product safety requirement be tested by a Consumer Product Safety Commission (CPSC) accepted laboratory for compliance with the applicable federal children's product safety requirements. Accreditation by A2LA does not infer acceptance by the CPSC. Please verify this organization's acceptance status by using the CPSC's searchable database, located at http://www.cpsc.gov/cgi-bin/labsearch/

Accredited Laboratory

A2LA has accredited

APPLIED TECHNICAL SERVICES, LLC

Marietta, GA

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (*refer to joint ISO-ILAC-IAF Communiqué dated April 2017*).

Presented this 25th day of April 2024.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 1888.02
Valid to January 31, 2026

For the tests to which this accreditation applies, please refer to the laboratory's Chemical Scope of Accreditation.