



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

ELEMENT MATERIALS TECHNOLOGY NEW BERLIN INC.

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CHEMICAL

Valid To: August 31, 2024

Certificate Number: 0098.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform chemical analysis of metal and metal alloys and organic material characterization of adhesives, coatings, composites, elastomers, lubricants and plastics¹ using the following tests:

Test Technology	Elements	Test Method(s) ⁴	Third Party Documents
<u>Spectroscopy</u>			
Inductively Coupled Plasma (ICP)	All Elements Except: Ac, Am, At, Bk, Cf, Cm, Es, F, Fm, Fr, H, He, Kr, Lr, Md, N, Ne, No, Np, O, Pa, Pm, Po, Ra, Rn, Tc, Xe	CS-03	
Optical Emission Spectroscopy (OES)	Al, Ag, As, Au, B, Ba, Be, Bi, Ca, C, Cd, Ce, Cr, Co, Cu, Fe, Ga, Ge, Hg, In, La, Li, Md, Mg, Mn, Mo, Na, Ni, Nb, N, P, Pb, Pd, Pr, Pt, Si, S, Sb, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, V, W, Zn, Zr	CS-05	ASTM E415, E1086, E1251
Fourier Transform Infrared Spectroscopy (FTIR) (Qualitative)		PA-01	ASTM E334, E573, E1252
Portable X-Ray Fluorescence Spectroscopy	Al, Ag, Au, As, Ba, Bi, Br, Cd, Cl, Cr, Co, Cu, Fe, Hg, In, Mn, Mo, Ni, Nb, Pb, Pd, Pt, Sb, Se, Sn, Ti, V, W, Zn, Zr	CM-13 ²	ASTM E1476

Test Technology	Elements	Test Method(s) ⁴	Third Party Documents
<u>Spectroscopy Cont.</u>			
Lead (Pb) Content in Children's Metal Products (Including Children's Metal Jewelry) (using ICP-OES)	Pb		CPSC-CH-E1001-08.2
Lead (Pb) Content in Children's Non-Metal Products	Pb		CPSC-CH-E1002-08.2
Lead (Pb) in Paint and Other Similar Surface Coatings (using ICP-OES)	Pb		CPSC-CH-E1003-09, CPSC-CH-E1003-09.1
Energy Dispersive Spectroscopy (EDS) (Elemental Mapping, Coating Identification)		MA-15	ASTM E1508
<u>Combustion</u>			
Combustion (LECO)	C, S	CA-06	ASTM E1019
<u>Chromatography</u>			
Gas Chromatography/Mass Spectrometry (GC/MS) Determination of Phthalates			CPSC-CH-C1001-09.4
<u>Thermal Analysis</u>			
Differential Scanning Calorimetry (DSC)		PA-06	ASTM D3418; E793, E794, E1356, E2602
Oxidative Stability		PA-14	ASTM D3895, E1858 (Method A only)
Thermogravimetric Analysis (TGA)		PA-04	ASTM E1131
Thermomechanical Analysis (TMA)		PA-22	ASTM E831, E1545
<u>Coating Analysis</u>			
Weight of Coatings		CM-01	ASTM A90/A90M, A428; B137, B767; ISO 3892
Solvent Rub		PC-14	ASTM D4752, D5402; GM9509P
<u>Miscellaneous Testing</u>			
Density & Interconnected Porosity of Powdered Metal Alloys		CM-02	ASTM B311, B328 (Withdrawn 2009) ³ , B962, B963; MPIF Std. 42, MPIF Std. 57; SAE J471D
Density of Polymers		PA-02	ASTM D792
Filler Reinforcement of Cured Resins		PA-03	ASTM D2584



Test Technology	Elements	Test Method(s) ⁴	Third Party Documents
Miscellaneous Testing Cont.			
Fluid Resistance		PA-11 PA-13	ASTM D471, D543, D1308
3A Sanitary Standard Test for Plastics & Elastomers		CM-08 CM-12	3A Sanitary Standards 18 & 20
Water Immersion		PA-15 PC-14	ASTM D570, D870; GM9514P (Withdrawn 2011) ³
Heat Aging		PA-08 PA-10	ASTM D573, D3045
Melt Flow		PA-30	ASTM D1238 (Method A & B)
Failure Analysis			Using test methods listed above in accordance with the ASM Handbook Volume 11

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/>.

² This laboratory performs field testing.

³ This laboratory's scope contains withdrawn or superseded methods. As a clarifier, this indicates that the applicable method itself has been withdrawn or is now considered "historical" and not that the laboratory's accreditation for the method has been withdrawn.

⁴ When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard measurement method, per part C., Section 1 of A2LA R101 - General Requirements- Accreditation of ISO-IEC 17025 Laboratories.



Accredited Laboratory

A2LA has accredited

ELEMENT MATERIALS TECHNOLOGY NEW BERLIN INC.

New Berlin, WI

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 28th day of November 2022.

A blue ink signature of Mr. Trace McInturff.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0098.01
Valid to August 31, 2024

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