



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

GALBRAITH LABORATORIES, INC.
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CHEMICAL

Valid to: July 31, 2013

Certificate Number: 2777.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following tests:

Metals Analysis:

Test Name	Test Number
Determination of Mercury by Automated Cold Vapor Atomic Absorption	E80-3
Inductively Coupled Plasma – Atomic Emission Spectrometry	EPA SW-846 Method 6010B
Inductively Coupled Plasma – Mass Spectrometry	EPA SW-846 Method 6020
Standard Test Method for Elements in Digestates by Inductively Coupled Plasma Mass Spectroscopy	ME-30
Inductively Coupled Plasma Atomic Emission Spectrometry	ME-70
Atomic Absorption Spectrometry	ME-71
Semi-Quantitative Metals Screen by Mass Spectrometry	ME-31

Chemical Analysis:

Test Name	Test Number
Determination of Total Halogens or Total Halides by Potentiometric Titration	E17-1
Determination of Nitrogen by the Kjeldahl Method	E7-1
Nitrogen by Ion-Selective Electrode	E7-6
Determination of Fluoride Ion by Ion-Selective Electrode	E9-1
Determination of Total Fluorine by Oxygen Flask Combustion and Ion-Selective Electrode	E9-3
Determination of Iodine by Ion-Selective Electrode	E53-4
Determination of Total Ash Content by Muffle Furnace	G-45A
Determination of Anions by Suppressed Ion Chromatography	ME-4A
Determination of Anions and Organic Acids by Suppressed Ion Chromatography	ME-4C
Loss on Drying	S-200
Determination of Water by Coulometric Titration (Karl Fischer)	S-300
Volumetric Karl Fischer Water Determination Using the Mettler DL35 Titrator	S-301
Determination of Water	USP <921>

Combustion Analysis:

Test Name	Test Number
Sulfur Determinations Using the LECO SC-432DR	E16-2
Determination of Inorganic Carbon	E6-5
Coulometric Determination of Total Carbon	E6-6
Total Organic Carbon	USP <643>
Total Organic Carbon	E6-8
Determination of Oxygen Content	E8-4
Determination of Total Organic Carbon	EPA Method 415.1
Carbon, Hydrogen and Nitrogen Determination using the LECO CHN 2000	ME-11
Carbon, Hydrogen and Nitrogen Determination using the PerkinElmer 240 Elemental Analyzer	ME-2
Carbon, Hydrogen and Nitrogen Determination using the CE-440	ME-3
Determination of Total Halogens and Total Halides by Microcoulometry	ME-13

Chromatographic Analysis:

Test Name	Test Number
Residual Solvents by Headspace Gas Chromatography	GC-100H
Analysis of Residual Solvents by Gas Chromatography using Direct Injection and Flame Ionization Detection	GC-100D
High Performance Liquid Chromatography (HPLC) Customer Analysis Method	LC-100

Consumer Product Safety Testing:

Test Name	Test Number
16 CFR 1303, CPSC Standard Operating Procedure for Determining Lead (Pb) in Paint	G-52/ME70
16 CFR Part 1303, Standard Operating Procedure for Determining Total Lead in Children's Metal Products (Including Children's Metal Jewelry) 12/4/2008	CPSC-CH-E1001-08 G-52/ME-70
16 CFR Part 1303, Standard Operating Procedure for Determining Total Lead in Non-metal Children's Products	CPSC-CH-E1002-08 ME-70
16 CFR Part 1303 ,Standard Operating Procedure for Determining Lead (Pb) in Paint and Other Similar Surface Coatings	CPSC-CH-E1003-09.1 ME-70



Preparation Methods:

Test Name	Test Number
Sample Homogenization	G-8
Wet Ash Digestion of Inorganic and Organic Compounds for Metals Analysis by Inductively Coupled Plasma – Optical Emission Spectroscopy, ICP-MS, Flame Atomic Absorption and Graphite Furnace Atomic Absorption	G-30B
Sample Preparation – Water Dilution	G-35A
Solvent Dissolution	G-35D
Preparation of Sample for the Determination of Extractable Ions	G-40
Dry Ash Preparation for Trace Boron Analysis by Inductively Coupled Plasma Emission Spectroscopy	G-45D
Dry Ash Digestion of Organic Compounds for Metal Analysis by Inductively Coupled Plasma – Optical Emission Spectroscopy or Atomic Absorption Spectroscopy	G-45E
Microwave Assisted Acid Digestion of Samples for Metals Analysis	G-52
Oxygen Flask Combustion	G-54
Paar Oxygen Bomb Combustion for the Determination of Halogens (General Application)	G-55
Potassium Hydroxide Fusion for Metals by Inductively Coupled Plasma – Optical Emission Spectroscopy, Atomic Absorption Spectroscopy and ICP-MS	G-56A
Potassium Persulfate Fusion for Metals by Inductively Coupled Plasma – Optical Emission Spectroscopy, Atomic Absorption Spectroscopy and ICP-MS	G-56B
Sodium Carbonate Fusion for Boron and Non-Volatile Si Analysis by Inductively Coupled Plasma – Optical Emission Spectroscopy, Atomic Absorption Spectroscopy and ICP-MS	G-56C
Lithium Borate Fusion for Refractory, Ceramic, and Zeolite Sample Types for Inductively Coupled Plasma – Optical Emission Spectroscopy, Atomic Absorption Spectroscopy and ICP-MS	G-56D
Sodium Peroxide Fusion for Ruthenium and Other Refractory Metal Oxides by Inductively Coupled Plasma – Optical Emission Spectroscopy and ICP-MS	G-56F
Sodium Hydroxide Fusion for Metals by Inductively Coupled Plasma – Optical Emission Spectroscopy, Atomic Absorption Spectroscopy and ICP-MS	G-56G
Sodium Peroxide Fusion in a Paar Bomb for Volatile or Organic Silicon Compounds by Inductively Coupled Plasma – Optical Emission Spectroscopy and ICP-MS	G-56H
Sodium Carbonate Fusion for Fluoride Analysis	G-70



World Class Accreditation

The American Association for Laboratory Accreditation

Accredited Laboratory

A2LA has accredited

GALBRAITH LABORATORIES, INC.

Knoxville, TN

for technical competence in the field of

Chemical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 *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 8 January 2009*).

Presented this 25th day of August 2011.





Peter Meyer

President & CEO
For the Accreditation Council
Certificate Number 2777.01
Valid to July 31, 2013

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