Accredited Laboratory

A2LA has accredited

EMSL ANALYTICAL, INC.

Cinnaminson, NJ

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 laboratory also meets the requirements of A2LA R204 - *Specific Requirements- Food and Pharmaceutical Testing Laboratory Accreditation Program*. 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 8th day of May 2017.

President and CEO
For the Accreditation Council
Certificate Number 2845.15
Valid to May 31, 2019

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

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

EMSL ANALYTICAL, INC.
200 Route 130 North
Cinnaminson, NJ 08077
Oommen Kappil Phone: 856 303 2550

CHEMICAL

Valid To: May 31, 2019 Certificate Number: 2845.15

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the laboratory's compliance with the A2LA Food Testing Program Requirements, containing 2015 *"AOAC International Guidelines for Laboratories Performing Microbiological and Chemical Analyses of Food, Dietary Supplements, and Pharmaceuticals")*, accreditation is granted to this laboratory to perform the following tests on Food, Food Products, Feeds, Food Additives, Beverages, and Environmental Samples:

Internal Procedure	Test	Test Method(s)
FC-SOP-01	Protein by Combustion	AOAC 968.06 AOAC 992.15 AOAC 992.23 AOAC 993.13
FC-SOP-02	Calories and Carbohydrates by Calculation	21 CFR Part 101 SubPart A Sec 101.9
FC-SOP-04	Ash	AOAC 923.03
FC-SOP-05	Cholesterol in Foods	AOAC 994.10
FC-SOP-06	Crude Fats in Food Products	AOAC 932.06 AOAC 989.05 AOAC 991.36 AOAC 2003.05
FC-SOP-07A	Vitamin A by HPLC	AOAC 2001.13 (Modified)
FC-SOP-42	Vitamin D in Foods	AOAC 2011.11
FC-SOP-08	Sugars by HPLC	AOAC 982.14
FC-SOP-09	Calcium, Copper, Iron, Magnesium, Manganese, Potassium, Phosphorus, Sodium and Zinc in Food Products	AOAC 2011.14
FC-SOP-10	Moisture by Convection Oven	AOAC 930.15 AOAC 950.46
FC-SOP-11	Moisture by Vacuum Oven	AOAC 927.05
FC-SOP-12	Total Dietary Fiber, Soluble Dietary Fiber, and Insoluble Dietary Fiber	AOAC 985.29 AOAC 991.42 AOAC 991.43 AOAC 993.19

Internal Procedure	Test	Test Method(s)
FC-SOP-13	Fatty Acid Profile	AOAC 996.06
FC-SOP-14	Heavy Metals in Food Products	AOAC 2011.19 Journal of AOAC Vol 90, No 3. (2007)
FC-SOP-16	pH of Foods	AOAC 920.49 AOAC 943.02 AOAC 945.10 AOAC 945.27 AOAC 970.21 AOAC 981.12
FC-SOP-17	Water Activity of Foods	AOAC 978.18
FC-SOP-41	Vitamin C in Food Items	Journal of Chromatography, (1995), 355-357, 667 Methods of Nutritional Biochemistry, (1993) pages 184-190

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following types of Metals, Powdered Metals, Consumer Products Tests, and Brake Friction Material:

Internal Procedure	Test	Test Methods
MS-SOP-402-1	Optical Emission Spectrochemical (OES) Analysis (Steel: Ni alloys, Al alloys) Ag, Al, Ba, C, Ca, Cd, Cl, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, N, Na, Ni, O, P, Pb, S, Sb, Si, Sn, Ti, V, W, Zn, Zr	ASTM A751 ASTM E227 ASTM E415 ASTM E1086 ASTM E1251 ASTM E1999
MS-SOP-401-1	X-Ray Fluorescence (XRF) Spectrochemical Analysis Ag, Al, As, Br, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, S, Sb, Se, Si, Sn, Sr, Ti, V, Zn	ASTM A751 ASTM E322 ASTM E1621 ASTM E1085
MS-01-1	X-Ray Diffraction (XRD)	----------
MS-SOP-400-1	Carbon and Sulfur by Combustion (LECO)	ASTM E1019 ASTM E1941
MS-SOP-404-2	ICP-OES Ag, Al, B, Bi, Co, Cr, Cu, Fe, Ga, Mg, Mo, Nb, Ni, P, Pb, S, Sb, Si, Sn, Ti, Tl, W, V, Cd, Cr, Cu, Ni, Pb, Sb, Zn	SAE J2975 SW-846 6010C
MS-SOP-403-2	ICP-MS Ag, Al, B, Bi, Co, Cr, Cu, Fe, Ga, Mg, Mo, Nb, Ni, P, Pb, S, Sb, Si, Sn, Ti, Tl,	SAE J2975

	W, V	
Internal Procedure	**Test**	**Test Method(s)**
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WC-034	Hexavalent Chromium	SAE J2975, SW-846 7196A
WC-034	Alkaline Digestion for Hexavalent Chromium	SAE J2975, SW-846 3060A
LM-012A	Mercury (Hg)	SAE J2975, SW-846 7471B
LM-022	Acid Digestion of Sediments, Sludges, and Soils	SAE J2975, SW-846 3050B
LM-016A	Microwave Digestion for Metals in Soils and Solids	SAE J2975, SW-846 3051A
MS-SOP-803-1	Explosion Severity/Go-No Go	ASTM E1226
MS-SOP-802-1	Minimum Ignition Energy	ASTM E2019
MS-SOP-801-1	Minimum Explosion Concentration	ASTM E1515
MS-SOP-800-1	Minimum Ignition Temperature (Dust Cloud)	ASTM E1491