FOOD INDUSTRY

List of standards (ISO, EN, AOAC etc.) for MGA spectrometers

Standard No	Title
ISO 5961:1994	Water quality – Determination of cadmium by atomic absorption spectrometry
ISO 6561-1:2005	Fruits, vegetables and derived products – Determination of cadmium content – Part 1: Method using graphite furnace atomic absorption spectrometry
ISO 6633:1984	Fruits, vegetables and derived products – Determination of lead content – Flameless atomic absorption spectrometric method
ISO 6637:1984*	Fruits, vegetables and derived products – Determination of mercury content – Flameless atomic absorption method
ISO/TS 6733:2006 (IDF/RM 133:2006)	Milk and milk products – Determination of lead content – Graphite furnace atomic absorption spectrometric method
ISO 8294:1994	Animal and vegetable fats and oils – Determination of copper , iron and nickel contents – Graphite furnace atomic absorption method
ISO 9174:1998	Water quality – Determination of chromium – Atomic absorption spectrometric methods
ISO 10540-2:2003	Animal and vegetable fats and oils – Determination of phosphorus content – Part 2: Method using graphite furnace atomic absorption spectrometry
ISO 11212-1:1997*	Starch and derived products – Heavy metals content – Part 1: Determination of arsenic content by atomic absorption spectrometry
ISO 11212-2:1997*	Starch and derived products – Heavy metals content – Part 2: Determination of mercury content by atomic absorption spectrometry
ISO 11212-3:1997	Starch and derived products – Heavy metals content – Part 3: Determination of lead content by atomic absorption spectrometry with electrothermal atomization
ISO 11212-4:1997	Starch and derived products – Heavy metals content – Part 4: Determination of cadmium content by atomic absorption spectrometry with electrothermal atomization
ISO 12020:1997	Water quality – Determination of aluminium – Atomic absorption spectrometric methods
ISO 12193:2004	Animal and vegetable fats and oils – Determination of lead by direct graphite furnace atomic absorption spectroscopy
ISO 14377:2002 (IDF 168:2002)	Canned evaporated milk – Determination of tin content – Method using graphite furnace atomic absorption spectrometry
ISO 15586:2003	Water quality – Determination of trace elements using atomic absorption spectrometry with graphite furnace
ISO 15774:2000	Animal and vegetable fats and oils – Determination of cadmium content by direct graphite furnace atomic absorption spectrometry
ISO 17239:2004*	Fruits, vegetables and derived products – Determination of arsenic content – Method using hydride generation atomic absorption spectrometry
ISO 17378-2:2014*	Water quality – Determination of arsenic and antimony – Part 2: Method using hydride generation atomic absorption spectrometry (HG-AAS)

ISO/TS 17379-2:2013*	Water quality – Determination of selenium – Part 2: Method using hydride generation atomic absorption spectrometry (HG-AAS)
ASTM C1466-00(2012)	Standard test method for graphite furnace atomic absorption spectrometric determination of lead and cadmium extracted from ceramic foodware
ASTM D1068-15	Standard test methods for iron in water
ASTM D1687-12	Standard test methods for chromium in water
ASTM D1886-14	Standard test methods for nickel in water
ASTM D1688-12	Standard test methods for copper in water
ASTM D3557-12	Standard test methods for cadmium in water
ASTM D3558-15	Standard test methods for cobalt in water
ASTM D3559-15	Standard test methods for lead in water
ASTM D3373-12	Standard test method for vanadium in water
ASTM D3559-15	Standard test methods for lead in water
ASTM D3645-15	Standard test methods for beryllium in water
ASTM D3859-15	Standard test methods for selenium in water
ASTM D3866-12	Standard test methods for silver in water
ASTM D3919-15	Standard practice for measuring trace elements in water by graphite furnace atomic absorption spectrophotometry
ASTM D4382-12	Standard test method for barium in water, atomic absorption spectrophotometry, graphite furnace
EN 1233:1996	Water quality – Determination of chromium – Atomic absorption spectrometric methods
EN 13806:2002*	Foodstuffs – Determination of trace elements – Determination of mercury by cold-vapour atomic absorption spectrometry (CVAAS) after pressure digestion
EN 14082:2003	Foodstuffs – Determination of trace elements – Determination of lead , cadmium , zinc , copper , iron and chromium by atomic absorption spectrometry (AAS) after dry ashing
EN 14083:2003	Foodstuffs – Determination of trace elements – Determination of lead , cadmium , chromium and molybdenum by graphite furnace atomic absorption spectrometry (GFAAS) after pressure digestion
EN 14084:2003	Foodstuffs – Determination of trace elements – Determination of lead , cadmium , zinc , copper and iron by atomic absorption spectrometry (AAS) after microwave digestion
EN 14332:2004	Foodstuffs – Determination of trace elements – Determination of arsenic in seafood by graphite furnace atomic absorption spectrometry (GFAAS) after microwave digestion
EN 14546:2005	Foodstuffs – Determination of trace elements – Determination of total arsenic by hydride generation atomic absorption spectrometry (HGAAS) after dry ashing
EN 14627:2005*	Foodstuffs – Determination of trace elements – Determination of total arsenic and selenium by hydride generation atomic absorption spectrometry (HGAAS) after pressure digestion
EN 15517:2008*	Foodstuffs – Determination of trace elements – Determination of inorganic arsenic in seaweed by hydride generation atomic absorption spectrometry (HGAAS) after acid extraction

EN 15764:2009	Foodstuffs – Determination of trace elements – Determination of tin by flame and graphite furnace atomic absorption spectrometry (FAAS and GFAAS) after pressure digestion
CEN/TS 16731:2014*	Foodstuffs – Determination of hydride-reactive arsenic compounds in rice by atomic absorption spectrometry (Hydride-AAS) following acid extraction
EPA Method 200.9	Trace elements by stabilized temperature graphite furnace atomic absorption spectrometry, Revision 2.2
EPA Method 231.2	Gold, atomic absorption, furnace technique
EPA Method 235.2	Iridium, atomic absorption, furnace technique
EPA Method 245.1*	Mercury in water by cold vapor atomic absorption spectrometry, Revision 3.0
EPA Method 252.2	Osmium, atomic absorption, furnace technique
EPA Method 253.2	Palladium, atomic absorption, furnace technique
EPA Method 255.2	Platinum, atomic absorption, furnace technique
EPA Method 265.2	Rhodium, atomic absorption, furnace technique
EPA Method 267.2	Ruthenium, atomic absorption, furnace technique
EPA Method 279.2	Thallium, atomic absorption, furnace technique
EPA Method 283.2	Titanium, atomic absorption, furnace technique
EPA Method 289.2	Zinc , atomic absorption, furnace technique
EPA Method 306	Chromium emissions electroplating/anodizing
EPA Method 0060	Determination of metals in stack emissions
APHA / AWWA / WEF Standard Method 3112*	Metals by cold-vapor atomic absorption spectrometry
APHA / AWWA / WEF Standard Method 3113	Metals by electrothermal atomic absorption spectrometry
APHA / AWWA / WEF Standard Method 3114B*	Arsenic and selenium by hydride generation/atomic absorption spectrometry
AOAC Official Method 990.05	Copper , iron , and nickel in edible oils and fats. Graphite furnace atomic absorption spectrophotometric method
AOAC Official Method 994.02	Lead in edible oils and fats. Direct graphite furnace atomic absorption spectrophotometric method
AOAC Official Method 997.15	Lead in sugars and syrups. Graphite furnace atomic absorption method
AOAC Official Method 999.10	Lead, cadmium, zinc, copper and iron in foods. Atomic absorption spectrophotometry after microwave digestion
AOAC Official Method 999.11	Determination of lead , cadmium , copper , iron and zinc in foods. Atomic absorption spectrophotometry after dry ashing
AOAC Official Method 999.17	Lead and cadmium extracted from ceramic foodware. Graphite furnace atomic absorption spectrometric (GFAAS) method
AOCS Official Method Ca 18-79	Analysis for chromium , copper , iron , nickel , and manganese in triglyceride oils by atomic absorption spectrophotometry using a graphite furnace
	CEN/TS 16731:2014* EPA Method 200.9 EPA Method 231.2 EPA Method 235.2 EPA Method 245.1* EPA Method 253.2 EPA Method 253.2 EPA Method 253.2 EPA Method 267.2 EPA Method 279.2 EPA Method 289.2 EPA Method 306 EPA Method 306 EPA Method 0060 APHA / AWWA / WEF Standard Method 3112* APHA / AWWA / WEF Standard Method 3113 APHA / AWWA / WEF Standard Method 3113 APHA / AWWA / WEF Standard Method 3114B* AOAC Official Method 990.05 AOAC Official Method 997.15 AOAC Official Method 999.10 AOAC Official Method 999.11 AOAC Official Method 999.17

AOCS Official Method Ca 18b-91	Determination of copper , iron , and nickel by direct graphite furnace atomic absorption spectrophotometry
AOCS Official Method Ca 18c-91	Determination of lead by direct graphite furnace atomic absorption spectrophotometry
AOCS Official Method Ca 18d-01	Determination of cadmium content by direct graphite furnace atomic absorption spectrophotometry
NMKL 94, 3. Ed., 2010	Lead and cadmium . Release from ceramic articles
NMKL 161, 1998	Metals . Determination by atomic absorption spectrophotometry after wet digestion in a microwave oven
NMKL 166, 2000	Arsenic . Determination in seafood by electrothermal atomic absorption spectrometry (ET AAS) after microwave digestion
NMKL 190, 2009	Tin (Sn). Determination in foods by flame or graphite furnace atomic absorption spectrometry (AAS)
OIV-MA-F1-10:2012	Specific methods for the analysis of grape sugar: heavy metal by ETAAS
OENO 67-2000	Wine vinegar – Measurement of lead content
OENO 68-2000*	Wine vinegar – Measurement of mercury content (cold vapour method)
ICUMSA Method GS 2/3-24 (1998)	The determination of lead in sugars and syrups by a GFAAS method – Official

^{*} with RGP-915 hydride generation system.

See also «AGRICULTURE» & «BEVERAGES» lists of standards.

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Lumex Instruments Canada

0890278 B.C. Ltd. Unit 207, 31510 Gill Ave., Mission, B.C., V4SOA1, Canada Toll free: +1 866-233-6057 Phone: +1 709-570-7538

E-mail: info@lumexinstruments.com

www.lumexinstruments.com

Lumex Analytics GmbH

Naher str., 8 24558 Wakendorf II, Germany Tel.: +49 (0) 4535 297-756 Fax: +49 (0) 4535 297-783

info@lumexanalytics.de www.lumexanalytics.de Lumex-Marketing LLC

pr. Obukhovskoy Oborony, 70, bldg. 2, St. Petersburg 192029, Russia Tel.: +7 (812) 718-5390 Fax: +7 (812) 718-5399 E-mail: sales@lumex.ru

Post address:

BOX 1234, St. Petersburg, 190000,

Russia www.lumex.ru Beijing Lumex Analytical Equipment Co. Ltd.

Room 902, Building A Zhichun Building, No.118 Zhichun Road, Haidian District, Beijing, 100086, PR China Tel.: +86 (10) 6412-9525 Fax: +86 (10) 6242-3844 E-mail: lumex@lumex.com.cn www.lumexcn.com