

Hellenic Accreditation System



Annex F1/8 to the Certificate No. 1111-3

SCOPE OF ACCREDITATION

of the

Hellenic Research & Innovation Centre

HRIC

Institute of Food Safety

of

YIOTIS S.A.

Materials / Products Tested	Types of Test / Measured Properties	Applied Standards / Techniques
Chemical Tests		
1. Cereal-based baby food	Determination of Vitamin A	5.4.1.2 In-house high performance liquid chromatography method (HPLC-DAD)
2. Milk-based infant formulas	Determination of Pb, Cd, Fe	5.4.1.1 In-house inductively coupled plasma mass spectrometry method (ICP-MS)
3. Cereal-based and milk-based Infant Formulas	Determination of Mg, K, Na, Ca, Mn, Zn, P	5.4.1.5 In-house inductively coupled plasma mass spectrometry method (ICP-MS)
4. Cereals and cereal-based products	1. Determination of As	5.4.1.1 In-house inductively coupled plasma mass spectrometry method (ICP-MS)
	2. Ash determination	5.4.1.11 In-house method based on AOAC 923.03
	3. Moisture determination	5.4.1.68 In-house gravimetric method
	4. Nitrogen and protein determination	5.4.1.9 In-house Kjeldahl method based on AOAC 935.39
	5. Total fat determination	5.4.1.64 In-house gravimetric method based on Weibull-Stoldt
	6. Total dietary fiber determination	5.4.1.65 In-house method based on AOAC 985.29

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5. Chocolate	Total fat determination	5.4.1.8 In-house method based on AOAC 963.15
6. Milk powder	1. Total fat determination	5.4.1.7 In-house method based on AOAC 932.06
	2. Nitrogen and protein determination	5.4.1.10 In-house Kjeldahl method based on AOAC 935.39
7. Milk and milk products in liquid and powder form and infant formula	Fatty acids determination	5.4.1.63 AOAC 2012.13 with GC-FID
8. Food products	Determination of sugars (fructose, glucose, sucrose, maltose, lactose)	5.4.1.66 In-house high performance liquid chromatography method (HPLC-RID)
9. Solid foods with high fat content	Moisture determination	5.4.1.73 In-house gravimetric method
10. Aqueous foods	Benzoic and Sorbic acid determination	5.4.1.6 In-house high performance liquid chromatography method (HPLC-DAD)
11. Materials and articles intended to come into contact with food	1. Overall migration into aqueous food simulant A (10% v/v ethanol)	5.4.1.26 In-house method by total immersion based on EN 1186-3:2002
	2. Overall migration into food simulant (95% v/v ethanol)	5.4.1.25 In-house method by cell based on EN 1186-14:2002
	3. Specific migration of Bisphenol A into aqueous simulants (A, B, C) and simulant D1 (50% ethanol)	5.4.1.67 In-house high performance liquid chromatography method (HPLC-FLD)
12. Water for human consumption, surface waters, aqueous solutions and foods	1. pH	5.4.1.23 In-house method based on APHA 4500-H+, 23 rd edition
	2. Conductivity	5.4.1.24 In-house method, based on APHA-2510, 23 rd edition
13. Water for human consumption, drilling water, surface water, bathing water	Determination of Cd, Pb, Cu, Al, Co, Se, Sb, Mn, Fe, As, Ni, Zn, Sn, Mo, Hg, Cr	5.4.1.14 In-house inductively coupled plasma mass spectrometry method (ICP-MS)
14. Thermally stressed foods (potatoes and their products, bakery ware)	Determination of acrylamide	5.4.1.49 In-house liquid chromatography with tandem mass spectrometry method (LC-MS/MS)
15. Fats and Oils (except from palm oil)	Determination of 5 Polycyclic Aromatic Hydrocarbons: (Benzo[α]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[a]pyrene and Chrysene)	5.4.1.45 In-house high performance liquid chromatography method (HPLC-FLD)

Materials / Products Tested	Types of Test / Measured Properties	Applied Standards / Techniques
16. Cocoa	Determination of 5 Polycyclic Aromatic Hydrocarbons: (Benzo[α]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[a]pyrene and Chrysene)	5.4.1.46 In-house high performance liquid chromatography method (HPLC-FLD)
17. Bakery ware	Coumarin determination	5.4.1.62 In-house high performance liquid chromatography method (HPLC-DAD)
18. Cereals, legumes and their products	<p>1. Pesticides residues determination</p> <p>(2-phenyl-phenol, Acetochlor, Alachlor, Aldrin, alpha-BHC, alpha-Endosulfan, Amitraz, Atrazine, Benalaxyl, Benfluralin, beta-BHC, Bifenazate, Bitertanol, Bromophos-ethyl, Bromuconazole, Bupirimate, Butralin, Cadusafos, Carboxin, Carfentrazone-ethyl, Chlofentezine, Chlorbenside, Chlorbufam, Chlorfenapyr, Chlorfenson, Chlorfenviphos, Chlorobenzilate, Chlorpropham, Chlorpyrifos, Chlorpyrifos-methyl, Chlorthal-dimethyl, cis-Chlordane, Clomazone, Cyhalofop-butyl, Diallate, Diazinon, Dichlobenil, Diclofop-methyl, Dicloran, Dicofof-deg-DCPB, Dieldrin, Dimethachlor, Dimethenamid, Dimethomorph, Diniconazole, Dioxathion, Endrin, Ethalfluralin, Ethion, Ethofumosate, Ethoprophos, Etofenprox, Etoxazole, Fenamidone, Fenamiphos, Fenarimol, Fenchlorphos, Fenitrothion, Fenpropathrin, Fenthion, Fipronil, Fludioxonil, Flumioxazin, Flusilazole, gamma-BHC, Heptachlor, Heptachlor-endo-epoxide, Heptachlor-exo-epoxide, Hexachlorobenzene, Iprovalicarb, Mepanipirim, Mepronil, Metazachlor, Methacrifos, Methoxychlor, Metolachlor, Myclobutanil, Napropamide, o,p-DDE, o,p-DDT, Oxadiazon, Oxadixyl, Oxyfluorfen, Paclbutrazol, Parathion, Parathion-methyl, Penconazole, Pendimethalin, Permethrin-2, Phenothrin-2, Piperonyl-butoxide, Pirimicarb, Pirimiphos-methyl, pp-DDD, p,p-DDE, p,p-DDT, Procymidone, Propachlor, Propamocarb, Propyzamide, Pyrazophos, Pyridaben, Pyridalyl, Pyriproxyfen, Quinalphos, Quintozene, Resmethrin-2, Simazine, Tebufenpyrad, Tecnazene, Tefluthrin, Terbufos, Tetradifon, Thiobencarb, Tolclofos-methyl, trans-Chlordane, Triadimefon, Triallate, Triazophos, Tricyclazole, Triflumizole, Trifluralin, Triticonazole, Vinclozolin, Zoxamide-deg)</p>	5.4.1.69 In-house gas chromatography tandem mass spectrometry QuEChERS method (GC-MS/MS)

Materials / Products Tested	Types of Test / Measured Properties	Applied Standards / Techniques
18. Cereals, legumes and their products (continued)	<p>2. Pesticides residues determination</p> <p>(Acephate, Acetochlor, Alachlor, Ametoctradin, Amitraz, Atrazine, Azinphos-ethyl (Guthion ethyl), Benalaxyl, Bitertanol, Bromuconazole, Butralin, Cadusafos, Carbetamide, Carbofuran, Carboxin, Carfentrazone-ethyl, Chloridazon (Pyrazon), Chloroxuron, Chlorthiamid, Chromafenozide, Clethodim, Clodinafop-Propargyl, Clofentezin, Clomazone, Cyazofamid, Cymoxanil (Curzate), Dazomet, Desmedipham, Dichlorvos, Dimethenamide (SAN 582H), Dimethomorph(E), Diniconazole, Dinoseb, Diuron, Dodemorph, Eptc, Ethirimol, Ethoprop (Ethoprophos), Etoxazole, Fenamidone, Fenamiphos - sulfone, Fenamiphos - sulfoxide, Fenarimol, Fenazaquin, Fenchlorphos-oxon, Fenhexamid, Fenoxaprop-P, Fenthion, Fenthion-oxon, Fenthion-oxon-sulfoxide, Fenthion-sulfone, Fipronil, Florasulam, Flufenoxuron, Fluometuron, Fluopicolid, Flurtamone, Flusilazole, Forchlorfenuron, Imazalil (Enilconazole), Iprovalicarb, Isoxaben, Lenacil, Malathion, Mandipropamid, Mepanipyrim, Mepronil, Metaflumizone, Metamitron, Methabenzthiazuron, Methamidophos, Methiocarb (Mercaptodimethur), Methiocarb sulfone, Methiocarb sulfoxide, Metolachlor, Metribuzin, Mevinphos (Phosdrin), Molinate, Monocrotophos (Azodrin), Monolinuron (Phenylurea), Monuron, Myclobutanil, Napropamide, Novaluron, Oxadixyl, Oxamyl, Oxycarboxin, Paclobutrazol, Penconazole, Pencycuron, Pendimethalin (Penoxalin), Penoxsulam (Penoxalim), Pethoxamid, Phenmedipham, Phosphamidon, Phoxim, Piperonyl butoxide, Pirimicarb, Pirimifos-methyl, Profenofos, Propachlor, Propamocarb, Propanil, Propaquizafop, Propargite, Propham, Propoxur, Propyzamide (Pronamide), Proquinazid, Prosulfocarb, Pyrazophos, Pyridaben, Quinalphos (Diethquinalphione), Rotenone, Simazine, Spirodiclofen, Tebufenpyrad, Teflubenzuron, Thiabendazole, Thiodicarb, Triadimefon, Triallate, Triazophos, Trichlorfon (DEP), Tricyclazole, Triflumizol, Triticonazole)</p>	5.4.1.70 In-house liquid chromatography tandem mass spectrometry QuEChERS method (LC-MS/MS)
Microbiological Tests		
1. Food Products	2. Detection of <i>Listeria monocytogenes</i>	VIDAS <i>Listeria monocytogenes</i> II (LMO2) NF VALID Ref. BIO 12/11-03/04

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2. Food and feed	1. Detection of <i>Salmonella</i> spp.	VIDAS Easy Salmonella NF VALID Ref. BIO 12/16-09/05
	2. Colony count at 30°C	ISO 4833-1:2013
	3. Enumeration of presumptive <i>Bacillus cereus</i>	ISO 7932:2004
	4. Enumeration of coagulase - positive staphylococci (<i>Staphylococcus aureus</i> and other species)	ISO 6888-2:1999/Amd 1:2003
	5. Enumeration of <i>Enterobacteriaceae</i>	ISO 21528-2:2017
	6. Enumeration of β-glucuronidase-positive <i>Escherichia coli</i> at 37°C	ChromID™ Coli Agar (COLI ID-F) NF VALID. BIO 12/19-12/06
	7. Enumeration of coliforms	ISO 4832:2006
	8. Enumeration of mesophilic lactic acid bacteria	ISO 15214:1998
	9. Enumeration of sulfite reducing bacteria	ISO 15213-1:2023
	10. Enumeration of <i>Clostridium perfringens</i>	ISO 15213-2:2023
	11. Enumeration of <i>Listeria monocytogenes</i> and <i>Listeria</i> spp.	ISO 11290-2:2017
	12. Detection of <i>Enterobacteriaceae</i>	ISO 21528-1:2017
	13. Detection of <i>Salmonella</i> spp.	Molecular Detection Assay 2 – MDA2SAL96 NF VALID. (3M 01/16 - 11/16)
	14. Detection of <i>Listeria monocytogenes</i>	Molecular Detection Assay 2 – MDA2LMO96 NF VALID. (3M 01/15 - 09/16)
3. Meat and meat products	Enumeration of <i>Campylobacter</i> spp.	ISO 10272-2:2017
4. Foods in form of liquid or	1. Detection of <i>Cronobacter</i> spp.	ISO 22964:2017

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powder	2. Detection of <i>Cronobacter</i> spp. (100g of sample)	
5. Potable water, surface, and swimming pool water	1. Enumeration of culturable micro-organisms at 22 ± 2°C and 36 ± 2°C	ISO 6222:1999
	2. Enumeration of <i>Escherichia coli</i> and coliform bacteria	ISO 9308-1:2014/Amd 1:2016
	3. Detection and enumeration of intestinal enterococci	ISO 7899-02:2000
	4. Detection and enumeration of <i>Pseudomonas aeruginosa</i>	ISO 16266:2006
	5. Enumeration of <i>Clostridium perfringens</i>	ISO 14189:2013
Biological Tests		
1. Corn and corn-based products (food, processed flours, feed, raw materials)	Qualitative detection CaMV 35S promoter, NOS terminator, plant Endogenous DNA	5.4.1.30 & 5.4.1.28 In house real-time PCR method by using Foodproof_GMO_Screening_1_LyoKit, Foodproof_Plant_Detection_LyoKit
2. Soya and soya-based products (food, processed flours, feed, raw materials)	Qualitative detection of CaMV 35S promoter, NOS terminator, plant Endogenous DNA	5.4.1.30 & 5.4.1.28 In house real-time PCR method by using Foodproof_GMO_Screening_1_LyoKit, Foodproof_Plant_Detection_LyoKit
3. Rice and rice-based products (rice, rice-flour, processed rice products, feed)	Qualitative detection of CaMV 35S promoter, NOS terminator, plant Endogenous DNA	5.4.1.43 In house method by using Foodproof_GMO_Screening_1_LyoKit, Foodproof_Plant_Detection_LyoKit
4. Potato and potato-based products (raw materials, food, and feed)	Qualitative detection of CaMV 35S promoter, NOS terminator, plant Endogenous DNA	5.4.1.43 In house real-time PCR method by using Foodproof_GMO_Screening_1_LyoKit, Foodproof_Plant_Detection_LyoKit
Immunochemical Tests		
1. Food products	1. Quantitative determination of gluten/gliadin	5.4.1.15 In house ELISA method based on RIDASCREEN® Gliadin R7001 kit (AOAC-OMA 2012.01)
	2. Quantitative determination of allergen peanuts or parts of peanuts (sensitive)	5.4.1.29 In house ELISA method based on RIDASCREEN®Peanut R6811 (AOAC-RI 112102)
2. Chocolate and cocoa-based products, cereals, and cereal-based products	Quantitative determination of allergen hazelnut	5.4.1.48 In house ELISA method based on Eurofins Immunolab HAZ E01/04

Materials / Products Tested	Types of Test / Measured Properties	Applied Standards / Techniques
3. Chocolate and cocoa-based products	1. Quantitative determination of allergen almond	5.4.1.47 In house ELISA method based on Eurofins Immunolab ALM E01/04
	2. Quantitative determination of allergen Pistachio (<i>Pistacia vera</i>)	5.4.1.74 In house ELISA method based on Eurofins Immunolab PIS-E01/E04
4. Flours, cereals, and cereal-based products	Deoxynivalenol (DON) determination	5.4.1.44 In house ELISA method based on RIDASCREEN® (AOAC PT #000701)
5. Flours, cereals, and cereal-based products	Zearalenone (ZON) determination	5.4.1.33 In house ELISA method based on Bio-Shield Zearalenone B2796
6. Milk and milk powder	Aflatoxin M1 determination	5.4.1.32 In house ELISA method based on RIDASCREEN® Aflatoxin M1 (R1121)
7. Flours and bakery ware	Quantitative determination of allergen egg	5.4.1.56 In house ELISA method based on RIDASCREEN® Fast Egg R6402 (R-Biopharm Inc.)
8. Food and animal feeding stuffs	Detection and quantitative determination of allergen milk proteins	5.4.1.57 In house ELISA method based on RIDASCREEN® Fast Milk R4652 (AOAC PT #101501)
9. Flours and processed foods	Detection and quantitative determination of allergen soya proteins	5.4.1.58 In house ELISA method based on RIDASCREEN® FAST SOYA (R7102)

Site of assessment: **Laboratory permanent premises – Kifisou Av. 128, 121 31, Athens**

Approved signatories: **Dimitrios Ladikos, Ioanna Koloni, Vasiliki Giatrakou, Evangelia Krystalli, Alexandra Nanou**

This Scope of Accreditation replaces the previous one, dated 01.02.2023.

The Accreditation Certificate No. **1111-3**, according to ELOT EN ISO/IEC 17025:2017, is valid until 20.12.2026.

Athens, 9th of September 2024

Christos Nestoras
CEO of ESYD