Tsakalidis Analysis&Testing

LIST OF ACCREDITED ACTIVITIES WITHIN THE FLEXIBLE SCOPE	

Tested Materials / Products	Types of test/ Properties measured	Applied methods/ Techniques used	DATE OF INTRODUCTION	DATE OF LAST MODIFICATION
1. Water and wastewater	1. Determination of Conductivity (*)	*APHA 2510 B*[1]	13/03/2001	
	2. Determination of Alkalinity	*In house methodO.106 based on APHA 2320 B*	13/03/2001	
	3. Determination of pH (*)	*APHA 4500-H^{+}*[1]	13/03/2001	
	4A. Determination of Ammonium (*)	*APHA 4500-NH_3F*[1]	13/03/2001	
	4B. Determination of Ammonium (*)	*In house methodO.304 based on DIN 38406-E5-1 and ISO 7150-1*	27/05/2011	
	5. Determination of Sulfates (*)	*In house methodO.306 based on APHA 4500-SO_4*	13/03/2001	
	6. Determination of Nitrates (*)	*In house methodO.305 based on DIN 38405-D9-2 & ISO 7890-1-2*	12/04/2002	
	7. Determination of Nitrites (*)	*In house methodO.301 based on APHA 4500-NO_2B*	26/09/2005	
	8. Determination of Silicates	*APHA 4500-SiO_2C*[1]	13/03/2001	
	9. Determination of Chloride (*)	*APHA 4500-Cl B*[1]	13/03/2001	
	10. Determination of Turbidity (*)	*In house methodO.114 based on APHA 2130 B*	27/05/2011	
	11. Determination of C.O.D.	*In house methodO.308 based on DIN 38409-H41 & ISO 6060*	27/05/2011	

Tested Materials / Products	Types of test/ Properties measured	Applied methods/ Techniques used	DATE OF INTRODUCTION	DATE OF LAST MODIFICATION
	12. Determination of Cyanides (*) (total, free)	*In house methodO.309*	29/05/2012	
	13. Determination of Carbonate	*In house method O.106 based on APHA 2320 B*	02/08/2013	
	14. Determination of Bicarbonate	*In house method O.106 based on APHA 2320 B*	02/08/2013	
	15. Determination of Total Solids (*)	*APHA 2540B*[1]	12/12/2014	
	16. Determination of Total Dissolved Solids	*APHA 2540C*[1]	12/12/2014	
	17. Determination of Total Suspended Solids	*APHA 2540D*[1]	12/12/2014	
	18. Determination of Total Nitrogen	*In house method O.314/ (photometry)*	23/02/2017	
	19. Determination of Total Phosphorus	*In house method O.315/ (photometry)*	23/02/2017	
	20. Determination of Anions : Bromide, Nitrate (*), Sulphate (*), Fluoride (*), Phosphate (*), Chloride (*)	*In house method O.628 by Ion Chromatography*	23/04/2013	
	26. Determination of Cr (VI)	*EPA 7196 A*	29/05/2012	
	27. Determination of Phenols	*In house method O.311 based on APHA 5530*	03/02/2022	

Tested Materials / Products	Types of test/ Properties measured	Applied methods/ Techniques used	DATE OF INTRODUCTION	DATE OF LAST MODIFICATION
	28. Determination of Total Hardness (calculation)	*APHA 2340B*[1]	03/02/2022	
	29. Determination of Anionic Surfactants (MBAS)	*In house method O.321 based on APHA 5540 C*	16/03/2023	
	30. Determination of Oil & Grease	In house method *O.148 based on EPA 1664*	13/05/2025	
2. Water and wastewater	Determination of metals (Al*, As*, Ba, Be, Ca, Cd*, Co, Cr*, Cu*, Fe*, K, Mg, Mn*, Mo, Na*, Ni*, P, Pb*, Sb*, Se*, Sn, Sr, Ti, Tl, V, Zn, B*, U*, Hg*, Li)	*In house method O.520 based on EPA Method 6020B, ISO 17294-1:2004 & ISO 17294-2:2016 / ICP-MS*	03/02/2020	
3. Potable, surface and ground water	1. Determination of Total Hardness (as CaCO3)	ELOT *170:1980*	13/03/2001	
	2. Determination of Boron (*)	*APHA 4500-B B*	29/05/2012	
	3. Determination of Bromates (*), Chlorates(*), Chlorites(*)	*In house method O.624*	29/05/2012	18/05/2026 (Determination of Chlorates & Chlorites)
	4. Determination of Acrylamide (*)	*In house method O.625*	29/05/2012	
	5. Determination of Trialomethanes (*) (Chloroform, Dichlorobromomethane, Chlorodibromomethane, Bromoform), 1,2-Dichloroethane (*), Trichloroethene (*), Tetrachloroethene (*), Benzene (*), Vinylchloride (*)	*In house method O.617*	29/05/2012	

Tested Materials / Products	Types of test/ Properties measured	Applied methods/ Techniques used	DATE OF INTRODUCTION	DATE OF LAST MODIFICATION
	6. Determination of Epichlorohydrin (*)	In house method O.630 based on EN 14207	12/12/2014	
	7. Determination of Color	*APHA 2120 C*[1]	23/04/2013	
	8. Determination of Chlorine residual (total, free) (*)	*In house method O.312*	23/04/2013	
	9. Determination of Oxidisability (*) (Permanganate index value)	ELOT *827*	23/04/2013	
	10. Determination of 16 Polycyclic Aromatic Hydrocarbons: Acenaphthene, Acenaphthylene, Anthracene, Benzo[a]anthracene, Benzo[a]pyrene(*), Benzo[b]fluoranthene(*), Benzo[ghi]perylene(*), Benzo[k]fluoranthene(*), Chrysene, Dibenzo[a.h]anthracene, Fluoranthene, Fluorene, ` Indeno[1.2.3-cd]pyrene(*), Naphthalene, Phenanthrene, Pyrene	*In house method O.631 based on EPA 525.3*	12/12/2014	
3. Pool water	Determination of Chlorine residual (total, free) (*)	*In house method O.312*	23/04/2013	

Tested Materials / Products	Types of test/ Properties measured	Applied methods/ Techniques used	DATE OF INTRODUCTION	DATE OF LAST MODIFICATION
4. Foodstuffs and drinks ESYD G-METALS/01/01/20-10-2016	1. Determination of metals (As, Ca, Cd**, Cr, Cu, Fe, Hg**, K, Mg, Mn, Na, Ni**, P, Pb**, Se, Sn**, Zn)	*In house method O.521 based on AOAC 2015.01 / ICP-MS*	24/07/2017	19/11/2025 (Ni determination)
	2. Determination of Sorbic and Benzoic acid	*In house method O.608 / HPLC*	27/05/2011	
	3. Determination of Total Sugars and Sugars' Profile: fructose, galactose, glucose, sucrose, maltose, lactose	*In house method O.613*	16/03/2023	
5. Dried nuts, cereals and their products	Determination of Aflatoxins B1, B2, G1, G2	*In house method O.603 based on AOAC 991.31:2000*	20/06/2008	
6. High carbohydrate content food, Wine	Determination of Ochratoxin A	*In house method O.622*	29/05/2012	
7. Fish, wine	Determination of Histamine	*In house method O.611*	24/07/2017	
8. Cereals and their products	Determination of Propionic acid	*In house method O.600*	12/12/2014	
9. Cereals and their products, potato and its products	Determination of Acrylamide	*In house method O.637 based on method of QuEChERS (AOAC)*	24/07/2017	
10. Foods, Fats and Oils	Composition of Fatty Acids (saturated, unsaturated, monounsaturated, polysaturated, trans, Ω3 & Ω6)	*In house method O.606 based on AOAC 996.06*	03/02/2022	

Tested Materials / Products	Types of test/ Properties measured	Applied methods/ Techniques used	DATE OF INTRODUCTION	DATE OF LAST MODIFICATION
11. Bakery Products, Cereal Products, Cinnamon, Mahlab	Determination of Coumarin	*In house method O.614 / HPLC/UV-DAD*	16/03/2023	
12. Animal feeds	Determination of Metals (As, Ca, Cd, Cu, Fe, Hg, Mg, Mn, Na, P, Pb, Zn)	In house method O.521 based on AOAC 2015.01	16/03/2023	
13. Materials in contact with foodstuffs	1. Specific migration of metals into simulant 3% acetic: Al, As, Ba, Ca, Cd, Co, Cr, Cu, Eu, Fe, Gd, Hg, K, La, Li, Mg, Mn, Na, Ni, Pb, Sb, Tb, Zn	*In house method O.522 based on ISO 17294-1:2004 & ISO 17294-2:2016 / ICP-MS*	03/02/2022	
	2. Specific migration of Bisphenol A into aqueous simulants (A, B,C) and simulant D_1 (50% ethanol), into simulant Ethanol 95% and simulant D_2 (vegetable oil)	*In house method O.634/ HPLC-FLD*	23/02/2017	
	3. Specific migration of 10 Phthalate Esters into simulant D_2 (vegetable oil): DMP:Dimethyl Phthalate DEP: Diethyl Phthalate DIBP: Diisobutyl Phthalate DBP: Dibutyl Phthalate BBP: Benzyl-butyl Phthalate DEHP: Bis (2-ethylhexyl) phthalate DCHP: Dicyclohexyl Phthalate DNOP: Di-n-octyl Phthalate DINP: Diisononyl Phthalate DIDP: Diisodecyl Phthalate	*In house methodO.644 based on EN 13130-1:2004 & Food Additives and Contaminants, 1999, Vol. 16, No. 5, 197-206*	24/07/2017	

Tested Materials / Products	Types of test/ Properties measured	Applied methods/ Techniques used	DATE OF INTRODUCTION	DATE OF LAST MODIFICATION
	4. Specific migration of isophthalic and terephthalic acid into aqueous simulants (A, B, C) and simulant D_1 (50% ethanol) and simulant D_2 (vegetable oil)	*In house method O.650 based on EN 13130-2*	03/02/2022	
1. Water for human consumption, surface water, groundwater, pool water, sea water	1. Detection and enumeration of *Escherichia coli* and coliform bacteria	ISO 9308-1:2014	12/04/2002	
	2. Detection and enumeration of intestinal enterococci	*ISO 7899-2:2000*	12/04/2002	
	3. Enumeration of culturable micro-organisms at 22±2 °C and at 36±2 °C	*ISO 6222:1999*	12/04/2002	
2. Water for human consumption, surface water, groundwater, pool water	1. Detection and enumeration of *Pseudomonas aeruginosa*	*ISO 16266:2006*	26/09/2005	
	2. Detection and enumeration of *Cl. perfrigens* (including spores)	*ISO 14189:2013*	13/03/2001	
3. Water with a low concentration of interfering microorganisms (Matrix A)	Enumeration of Legionella	*ISO 11731:2017 (Annex J, Procedure 1, Medium A-BCYE & B-BCYE+AB)* *(Annex J, Procedures 5,7, 8,9,10, Medium A-BCYE & C – GVPC)*	12/12/2014	
4. Water with a high concentration of interfering microorganisms (Matrix B)	Enumeration of Legionella	*ISO 11731:2017 (Annex J, Procedures 8,9,10, Medium C – GVPC)*	12/12/2014	

Tested Materials / Products	Types of test/ Properties measured	Applied methods/ Techniques used	DATE OF INTRODUCTION	DATE OF LAST MODIFICATION
5. Water with extremely high concentration of interfering microorganisms (Matrix C)	Enumeration of Legionella	*ISO 11731:2017 (Annex J, Procedures 4, 14, Medium C – GVPC)*	12/12/2014	
6. Wastewater	1. Enumeration of Total coliforms	*APHA 9222B*[1]	03/02/2022	
	2. Enumeration of Fecal coliforms	*APHA 9222D*[1]	03/02/2022	
	3. Enumeration of Total coliforms and E. Coli	*ISO 9308-1:2014*	03/02/2022	
7. Food and animal feeding stuffs	1. Enumeration of Total coliforms	*ISO 4832:2006*	13/03/2001	
	2. Detection and Enumeration of *Escherichia coli*	*ISO 7251:2005*	13/03/2001	
	3. Detection of *Listeria monocytogenes*	*ISO 11290-1:2017*	13/03/2001	
	4. Detection of *Salmonella* spp. (ex svs typhi, paratyphi)	*ISO 6579-1:2017*	13/03/2001	
	5. Enumeration of coagulase positive Staphylococcus	*ISO 6888-2:2021*	13/03/2001	
	6. Enumeration of microorganisms -- Colony-count technique at 30^0 C	*ISO 4833-1:2013*	13/03/2001	
	7. Enumeration of *Bacillus cereus*	*ISO 7932:2004*	26/09/2005	
	8. Detection and Enumeration of *Clostidium perfringens*	*ISO 15213-2:2023*	26/09/2005	
	9. Enumeration of *Enterobacteriaceae*	*ISO 21528-2 :2017*	26/09/2005	

Tested Materials / Products	Types of test/ Properties measured	Applied methods/ Techniques used	DATE OF INTRODUCTION	DATE OF LAST MODIFICATION
	10. Enumeration of *Escherichia coli*	*ISO 16649-2:2001*	26/09/2005	
	11. Enumeration of *Listeria monocytogenes*	ISO 11290-2:2017	01/06/2007	
	12. Enumeration of beta-glucuronidase-positive *Escherichia coli* (MPN technique)	*ISO 16649-3:2015*	29/05/2012	
9. Food and animal feeding stuffs with a_w>0,95	Enumeration of yeasts and moulds	*ISO 21527-1:2008*	12/12/2014	
10. Food and animal feeding stuffs with $a_w \leq 0,95$	Enumeration of yeasts and moulds	*ISO 21527-2:2008*	12/12/2014	
11. **A**nimal faeces and environmental samples from the primary production stage	Detection of non-typhoidal -paratyphoid *Salmonella* spp.	*ISO 6579-1:2017*	27/05/2011	
12. Products intended for human consumption, animal feeding **&** environmental samples in the area of food and feed production	Enumeration of Campylobacter spp.	*ISO 10272-2 :2017*	12/12/2018	

**** Methods marked with (*) are in accordance with the method specification of Common Ministerial Decision D1 (δ)/ΓΠ 27829/2023 (ΦΕΚ 3525/Β/25-5-2023) and the Directive (EU) 2020/2184 concerning the quality of of water intended for human consumption.***

***** Methods marked with (**) are in accordance with the method specification of European Commission EC/333/2007 and its amendments..***

1.American Public Health Association, American Water Works Association, Water Environment Federation, "Standard Methods for the Examination of Water and Wastewater", 23rd Edition, 2017.
2.AOAC: Association of Analytical Communities
3. EPA: Environmental Protection Agency

LAST UPDATE:

18/05/2026