



EA MLA Signatory Český institut pro akreditaci, o.p.s. Olšanská 54/3, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products, as amended

## CERTIFICATE OF ACCREDITATION

No. 690/2020

EKOCENTRUM OVALAB, s.r.o. with registered office Martinovská 3248/166, Martinov, 723 00 Ostrava, Company Registration No. 26872196

to the Testing Laboratory No. **1162** EKOCENTRUM OVALAB Testing Laboratory

Scope of accreditation:

Chemical and microbiological testing of food, feedstuffs, pharmaceutical preparations, raw materials for the production of pharmaceuticals, biological materials, water and agricultural products to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of Accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

ČSN EN ISO/IEC 17025:2018

In its activities performed within the scope and for the period of validity of this Certificate, the Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited Conformity Assessment Body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 457/2019 of 6. 9. 2019, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: 12.11.2025

Prague: 12. 11. 2020





Jiří Růžička
Director

py m. 13.11

Czech Accreditation Institute Public Service Company

## Accredited entity according to ČSN EN ISO/IEC 17025:2018:

#### EKOCENTRUM OVALAB, s.r.o.

EKOCENTRUM OVALAB Testing Laboratory Martinovská 3248/166, Martinov, 723 08 Ostrava

The Laboratory has a flexible scope of accreditation permitted as detailed in the Annex.

Updated list of activities provided within the flexible scope of accreditation is available in the laboratory from the Laboratory Manager.

#### Tests:

Ordinal number <sup>1</sup>	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
1	Determination of elements (As, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Se, Zn)  1) by ICP-OES method	SOP A-01-1 (ČSN 56 0065, Manual ICP-OES ACROS SPECTRO)	Food, food supplements, feedstuffs, premixes and agricultural products, biological materials
2	Determination of elements (As, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, Se, Zn)  1) by ICP-OES method	SOP A-01-2 (EP, FCC, Manual ICP-OES ACROS SPECTRO)	Pharmaceutical products and raw materials, chemicals
3	Determination of elements (Ca, Fe, Mg, Mn, Na, P) 1) by ICP-OES method	SOP A-01-3 ČSN EN ISO 11885, Manual ICP-OES ACROS SPECTRO)	Water <sup>2)</sup> , recreational and hot water
4	Determination of Hg by AMA- 254 atomic absorption spectrometer	SOP A-02-1 (Operating Instructions – AMA 254, ALTEC s.r.o.)	Food, food supplements, feedstuffs, premixes and agricultural products, biological materials
5	Determination of Hg by AMA- 254 atomic absorption spectrometer	SOP A-02-2 (ČSN 75 7440, Operating Instructions – AMA 254, ALTEC s.r.o.)	Water <sup>2)</sup> , recreational and hot water
6	Determination of As 1) by hydride generation AAS method	SOP A-03-1 (ČSN EN 14546, Manual to AAS A-100 by Perkin-Elmer, MHS-20)	Food, food supplements, biological materials, feedstuffs
7	Determination of potential of hydrogen (pH) (by potentiometric method)	<b>SOP A-14</b> (ČSN ISO 10523)	Water <sup>2)</sup> , recreational and hot water
8	Determination of electrical conductivity of water (by conductometry)	<b>SOP A-15</b> (ČSN EN 27888)	Water <sup>2)</sup> , recreational and hot water
9	Determination of dissolved solids in water (by gravimetry)	<b>SOP A-17-1</b> (ČSN 757346)	Water <sup>2)</sup> , recreational and hot water
10	Determination of nitrite in water (by spectrophotometry)	(ČSN EN 26777)	Water <sup>2)</sup> , recreational and hot water
11	Determination of ammonium in water (by spectrophotometry)	SOP A-22 (ČSN ISO 7150-1)	Water <sup>2)</sup> , recreational and hot water

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Ordinal number 1	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
12	Determination of nitrate using the Merckquant set (by spectrophotometry)	SOP A-34 (Merck application sheet)	Drinking water
13-18	Reserved	e e	
19	Determination of peroxide value (by titration)	SOP C-03 (ČSN EN ISO 3960, Davídek J., Laboratory Manual of Food Analysis, 1981)	Food, food supplements, feedstuffs, premixes and agricultural products
20	Measurement of pH (by potentiometry)	SOP C-04 (ČSN ISO 1842, ČSN 57 0107, ČSN 58 0703-9, ČSN 57 0530, ČSN 57 0106, Davídek J., Laboratory Manual of Food Analysis, 1981)	Food, food supplements, feedstuffs, premixes and agricultural products
21	Determination of chloride content by silver nitrate titration and sodium chloride by calculation	SOP C-05 (ČSN ISO 1841-2, ČSN EN 12 133, ČSN EN ISO 5943)	Food, food supplements, feedstuffs, premixes and agricultural products
22	Determination of Kjeldahl nitrogen and nitrogenous substances, proteins, energy value, meat content and pure myosin content by calculation.	SOP C-06 (ČSN ISO 1871, Davídek J. et al.: Laboratory Manual of Food Analysis. 1981)	Food, food supplements, feedstuffs, premixes and agricultural products
23	Determination of the content of amino acids, sweeteners and vitamins <sup>3)</sup> by perchloric acid anhydrous titration in individual pure substances	SOP C-93 (ACS 10. Issue, EP 6.0, USP 35)	Pharmaceutical products and raw materials, premixes, pure substances
24-34	Reserved		
35	Determination of the content of water, dry matter and weight loss (by gravimetry)	SOP C-07 (ČSN 56 0116 – 3, ČSN 57 0530, ČSN 58 0170 – 4, ČSN 56 0198, ČSN 58 0120, ČSN 56 8197, ČSN 58 0010, ČSN 58 1361, ČSN 56 0115,	Food, food supplements, feedstuffs, premixes and agricultural products

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Ordinal number <sup>1</sup>	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
		ČSN 56 8193,	
		ČSN ISO 6734,	
		ČSN ISO 7703,	
		ČSN ISO 7702,	
		ČSN 58 0114:2001,	= 11
		ČSN 56 0290 – 4,	
		ČSN EN ISO 712,	
		ČSN  46 7092 - 3,	
		ČSN EN ISO 5537,	
		ČSN 57 0105-3:1998,	
		ČSN 57 0105-13,	
		ČSN 56 0520-6,	
		ČSN 58 8757:1994,	
		ČSN 56 8198,	a
		ČSN EN ISO 665,	
		ČSN 46 7092 -3,	
		ČSN 56 0146,	
		ČSN 56 0146 – 3,	
		ČSN EN ISO 3727:1997,	
		ČSN 56 0160 – 3:1987,	-
		ČSN 56 0188,	
		ČSN 57 6021,	ş
		ČSN ISO 1573,	
		ČSN ISO 7513,	
		100	1 1 1 1 1 1
		ČSN ISO 11294,	
		ČSN EN ISO 1666,	
		ČSN EN ISO 5534,	
		ČSN 58 0703 – 5,	
		ČSN ISO 6731,	
		ČSN 56 0130-3,	
		Davídek J. et al.: Laboratory	
		Manual of Food Analysis 1981)	
36	Determination of fat content	SOP C-09-1	Food food symplements
30	after acid hydrolysis (by	(Davídek J. et al.: Laboratory	Food, food supplements, feedstuffs, premixes and
	gravimetry)	Manual of Food Analysis	agricultural products
	S. T. M. C. J.	1981)	agricultural products
37	Determination of fat content by	SOP C-09-2	Food, food supplements,
	direct extraction (by	(ČSN ISO 1444,	feedstuffs, premixes and
	gravimetry)	ČSN 46 7092-7,	agricultural products
	3	Davidek J. et al.: Laboratory	
		Manual of Food Analysis	
		1981)	
		27	

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Ordinal number 1	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
38	Determination of saccharide 4) by iodometry	SOP C-11 (ČSN 56 0512-15, ČSN 56 0116-7, ČSN 56 0130-5, ČSN 56 0146-5, ČSN 57 0530, ČSN 57 0107, ČSN 57 0106, ČSN 56 0140, ČSN 57 0190, ČSN 46 7092 – 22, ČSN 56 0246 – 18, ČSN 46 7092 – 23, Davídek J. et al.: Laboratory Manual of Food Analysis 1981)	Food, food supplements, feedstuffs, premixes and agricultural products
39	Determination of titrable acidity 5)	SOP C-12 (ČSN 57 0190, ČSN ISO 750, ČSN EN 12147, ČSN 58 0703-10, ČSN 57 0105-8:1998, ČSN 57 0530, ČSN 57 0107, ČSN 56 0198, ČSN EN ISO 660, Davídek J. et al.: Laboratory Manual of Food Analysis 1981)	Bee honey, food, feedstuffs
40	Determination of density by vibration densitometer	SOP C-37-1 (ČSN 56 0198, EP 6.0)	Fruit and vegetable juices, beverages, aromatic and flavouring substances, milk and milk products, oils
41	Determination of density by vibration densitometer	SOP C-37-2 (EP 6.0)	Pure substances, pharmaceutical products and raw materials
42-49	Reserved		
51	Determination of sulphur dioxide <sup>6)</sup> by iodometry	SOP C-18 (ČSN ISO 5523, ČSN 56 0246-22, ČSN 56 0216-7, Davídek J. et al.: Laboratory Manual of Food Analysis 1981	Wine, fruit and vegetable products, canned products and semi-finished products made of fruit and vegetables, food

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Ordinal number 1	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
51	Determination of ash, sand and acid-insoluble part (gravimetry)		Food, food supplements, feedstuffs, premixes and
		ČSN 56 0130-4,	agricultural products
		ČSN 56 0160-6,	
		ČSN 58 0703-11,	
		ČSN ISO 928,	
		ČSN ISO 763,	
		ČSN EN 1135,	
		ČSN 56 0146-6,	N.
		ČSN 46 7092-9,	
		ČSN 56 0216,	
		ČSN ISO 1575,	
		ČSN ISO 7514,	
		ČSN 58 1361,	_
		ČSN 56 0232,	-
		ČSN 56 0246-12,	v.
		ČSN 56 0115,	
		ČSN 57 0190,	
		ČSN ISO 1577,	
		ČSN 56 0290,	
		ČSN 58 0113,	
		ČSN 58 1302,	
		ČSN 58 0110,	
		EP,	
		Davídek J. et al.: Laboratory	
		Manual of Food Analysis	
		1981)	
52	Reserved		
53	Determination of iodine,	SOP C-27	Food, food supplements,
	iodides and iodates 7) by	(ČSN 58 0111,	feedstuffs, premixes and
	titration (iodometry)	ACS 10. Issue, 124/2001 Coll.)	
		Regulation specifying the	substances, beverages
		requirements for sampling and	
		principles of laboratory testing	
		of feedstuffs, complements and	
54	Determination of starch	premixes) SOP C-34	F1 6-1 1
J <b>-</b> †	according to Ewers (by	(ČSN 56 0512-16,	Food, food supplements,
	polarimetry)	ČSN 58 0120,	feedstuffs, premixes and agricultural products
	,	ČSN 46 7092-21,	agricultural products
		Davidek J. et al.: Laboratory Manual of Food Analysis	
		1981) Alacold Markett Abri Oadah	

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Ordinal number 1	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
55	Volumetric determination of water by Karl Fischer method	SOP C-43-1 (ČSN 58 8759:1994, ČSN 56 0146, EP 6.0)	Food, food supplements, feedstuffs, premixes and agricultural products
56	Volumetric determination of water by Karl Fischer method	SOP C-43-2 (ACS 10. Issue, EP 6.0, USP 35, FCC 9. Issue)	Pure substances, pharmaceutical products and raw materials
57	Determination of nitrate content by Merckquant kit (by spectrophotometry)	SOP C-47 (Merck Application notes)	Fruit and vegetable products, canned products and semi-finished products made of fruit and vegetables, food an agricultural products
58	Determination of organic fatty acids 8) by GC/FID method	SOP C-75 (ČSN EN ISO 12966-1, ČSN ISO 5508:1998)	Food, food supplements, feedstuffs, premixes and agricultural products
59	Determination of mycotoxins <sup>9)</sup> by HPLC/FLD, DAD Method	SOP C-76 (Vicam Application notes)	Food, food supplements, feedstuffs, premixes and agricultural products
60	Determination of dietary fibre by enzymatic method	SOP C-83 (AOAC 991.43, Merck and Megazyme Application notes)	Food, food supplements, premixes and agricultural products
61	Determination of specified substances <sup>10)</sup> by HPLC/RID method	SOP C-85 (Davídek J. et al.: Laboratory Manual of Food Analysis, 1981, Application notes of Restek, Tessek, EP 8.0)	Food, food supplements, feedstuffs, premixes and agricultural products
62	Determination of non-volatile substances <sup>11)</sup> by HPLC/ELSD method	SOP C-92 (Validation of an analytical method for the simultaneous determination of nine intense sweeteners by HPLC-ELSD, Report on the final collaborative trial, institute for Reference Materials and Measurements, Geel, BE, Shimadzu Application notes)	Food, food supplements, premixes and agricultural products
63-70	Reserved	,	12 .42
71	Determination of the content of morphine by HPLC/UV method	SOP C-97-1 ak (EP 6.0, Separation and determination of opium alkaloids by HPLC.	Poppy and poppy straw

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Ordinal number 1	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
		Y.Nobuhara, et al. Journal of Chromatography 190, 1980)	f
72	Determination of the content of glutamic acid and glutamates by HPLC/UV method	SOP C-97-2 (ČSN 46 7092-25, Wei Z. et al. Journal of Chinese Chemical Society, 2011,58,509-515)	Food, dehydrated products, flavouring agents
73	Determination of specified organic acids <sup>12)</sup> by HPLC/UV method	SOP C-97-3 (TOSOH, RESTEK Application notes)	Food, feedstuffs, food supplements
74	Determination of the content of free amino acids <sup>13)</sup> by HPLC/UV method	SOP C-97-4 (ČSN 46 7092-25, ČSN EN ISO 13 903, ČSN EN ISO 17 180, Wei Z. et al. Journal of Chinese Chemical Society, 2011, 58, 509-515)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
75	Determination of pantothenic acid and pantothenates by HPLC/UV method	SOP C-97-5 (Wei Z. et al. Journal of Chinese Chemical Society, 2011, 58, 509-515, Hudson T. S. Subramanian S., Allen R. J.: "Determination Of Pantothenic acid, Biotin and Vitamin B <sub>12</sub> in Nutritional Products", Journal of Association of Analytical Chemists 1984)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
76	Determination of taurine content by HPLC/UV method	SOP C-97-6 (Spitze A. R. et al. J. Ami. Physiol. A. Anim. Nutr. 87, (2003), 251-262)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
77	Determination of rutin, hesperidin, diosmin and chlorogenic acid by HPLC/UV method	SOP C-97-7 (EP 6.0, Šatinský D. et al. Determination of Rutin, Troxerutin, Diosmin and Hesperidin in Food Supplements Using Fussed-Core Column Technology, Food Anal. Methods, 2013) 6: 1353-1360)	Food, food supplements, premixes and beverages

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Ordinal number <sup>1</sup>	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
78	Determination of curcumin (E100) by HPLC/UV method	SOP C-97-8 (EP 6.0, Nagappan K. V et al.: Liquid Chromatography Method for the Simultaneous Determination of Curcumin and Piperin In Food Products using DAD: Asian J. Research Chem. 2,2: AprilJune, 2009)	Food, food supplements, premixes and beverages
79	Determination of coumarin, vanillin and ethylvanillin by HPLC/UV-VIS method	SOP C-97-9 (Agilent Application Notes)	Food, food supplements, premixes, beverages
80-81	Reserved		
82	Enumeration of <i>Escherichia</i> coli on chromogenic agar – colony count technique	<b>SOP M-01</b> (ČSN ISO 16649-2)	Food, food supplements, feedstuffs
83	Horizontal method for the detection and enumeration of <i>Listeria monocytogenes</i>	<b>SOP M-03-1</b> (ČSN EN ISO 11290-1, ČSN EN ISO 11290-2)	Food, food supplements, feedstuffs, smear
84	Detection of <i>Listeria</i> monocytogenes by mini VIDAS	SOP M-03-2 (Biomérieux Application Notes ČSN EN ISO 11290-1)	Food, food supplements, feedstuffs, smear
85	Reserved		
86	Detection of Salmonella spp. by mini VIDAS	SOP M-04-2 (Biomérieux Application Notes ČSN EN ISO 6579-1)	Food, food supplements, feedstuffs, smear
87	Horizontal method for the enumeration of yeasts and moulds in products with water activity less than or equal to 0.95 – colony count technique	<b>SOP M-05-1</b> (ČSN ISO 21 527-1)	Food, food supplements, feedstuffs
88	Horizontal method for the enumeration of yeasts and moulds in products with water activity more than 0.95 – colony count technique	SOP M-05-2 (ČSN ISO 21 527-2)	Food, food supplements, feedstuffs
89	Enumeration of coliforms by colony count technique	<b>SOP M-06</b> (ČSN ISO 4832)	Food, food supplements, feedstuffs
90	Enumeration of microorganisms  - Colony count technique at 30  Degrees C	SOP M-07 (ČSN EN ISO 4833-1, ČSN EN ISO 4833-2)	Food, food supplements, feedstuffs

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Ordinal number 1	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
91	Enumeration of coagulase- positive staphylococci (Staphylococcus aureus and other species) – colony count technique	<b>SOP M-08</b> (ČSN EN ISO 6888-1, ČSN EN ISO 6888-2)	Food, food supplements, feedstuffs
92	Enumeration of presumptive Bacillus cereus – colony count technique	SOP M-09 (ČSN EN ISO 7932)	Food, food supplements, feedstuffs
93	Enumeration of Enterobakteriaceae – colony count technique	<b>SOP M-10</b> (ČSN ISO 21 528-2)	Food, food supplements, feedstuffs
94	Detection and enumeration of Escherichia coli and coliform bacteria by membrane filtration method	<b>SOP M-16</b> (ČSN EN ISO 9308-1)	Drinking, surface and hot water
95	Detection and enumeration of intestinal enterococci by membrane filtration method	<b>SOP M-17</b> (ČSN EN ISO 7899-2)	Drinking, surface and hot water
96	Enumeration of culturable microorganisms – colony count technique	SOP M-19 (ČSN EN ISO 6222)	Drinking, recreational and ho water
97	Detection of <i>Candida albicans</i> according to ČL by culture method	<b>SOP M-72</b> (ČL cl. 2.6.13)	Pharmaceutical products and raw materials, food supplements and cosmetics
98	Detection of <i>Escherichia coli</i> according to ČL by culture method	<b>SOP M-65-1</b> (ČL cl. 2.6.13)	Pharmaceutical products and raw materials, food supplements and cosmetics
99	Enumeration of <i>Escherichia</i> coli according to ČL by culture method	<b>SOP M-65-2</b> (ČL cl. 2.6.13)	Pharmaceutical products and raw materials, food supplements and cosmetics
100	Detection of <i>Pseudomonas</i> aeruginosa according to ČL by culture method	<b>SOP M-67</b> (ČL cl. 2.6.13)	Pharmaceutical products and raw materials, food supplements and cosmetics
101	Detection of <i>Staphylococcus</i> aureus according to ČL by culture method	<b>SOP M-68</b> (ČL cl. 2.6.13)	Pharmaceutical products and raw materials, food supplements and cosmetics
102	Total viable count of aerobes according to ČL by culture method – colony count technique	<b>SOP M-69</b> (ČL cl. 2.6.13)	Pharmaceutical products and raw materials, food supplements and cosmetics
103	Determination of food allergens14) by ELISA method	SOP M-89 (R-Biopharm application sheet)	Food, food supplements, premixes
104-107	Reserved	O. Markot Market O.	

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Ordinal number 1	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
108	Determination of vitamins A and E <sup>15)</sup> by HPLC/FLD method	SOP O-03 (Davídek J., Laboratory Manual of Food Analysis, 1981, Application Notes of Shimadzu, Restek)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
109	Determination of preservatives  16) by HPLC/UV-VIS method	SOP O-06 (Davídek J., Laboratory Manual of Food Analysis, 1981, Application Notes of Shimadzu, Restek)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
110	Determination of vitamin C <sup>17)</sup> by HPLC/UV-VIS method	SOP O-07 (ČSN EN 14130:2004, EP 7.0, Shimadzu Application Notes)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
111	Determination of vitamins B <sub>1</sub> , B <sub>2</sub> , B <sub>6</sub> <sup>18)</sup> by HPLC/FLD method	SOP O-08	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
112	Determination of artificial sweeteners <sup>19)</sup> , caffeine and theobromine by HPLC/UV-VIS method	SOP O-09 (ČSN EN 12 856, Davídek J., Laboratory Manual of Food Analysis, 1981, Shimadzu Application Notes)	Food, food supplements, premixes and agricultural products, beverages
113	Determination of sterols <sup>20)</sup> by GC/FID method	SOP O-10 (EP 6.0, Davídek J., Laboratory Manual of Food Analysis, 1981)	Food, food supplements
114	Determination of vitamin B12 by HPLC/UV-VIS method	SOP O-11 (EP 6.0)	food supplements, premixes
115	Determination of vitamin B3 (niacin and nicotinamide) by HPLC/UV-VIS method and calculation of their sum	SOP O-13 (La Roche, Shimadzu Application Notes)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
116	Determination of carotenoids <sup>21)</sup> by HPLC/UV-VIS method	SOP O-14 (ČSN EN 12823-2, Shimadzu Application Notes)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
117	Determination of vitamin B12 by ELISA method	SOP O-17-1 (R-Biofarm, Immunolab application sheets)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages

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Ordinal number 1	Test procedure/method name	Test procedure/method identification <sup>2</sup>	Tested object
118	Determination of folic acid by ELISA method	SOP O-17-2 (R-Biofarm, Immunolab application sheets)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
119	Determination of biotin by ELISA method	SOP O-17 (R-Biofarm, Immunolab Application Notes)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
120	Determination of coenzyme Q10 by HPLC/UV-VIS method	SOP O-24 (Dietary Supplements Compendium)	Food, food supplements, beverages
121	Determination of folic acid by HPLC/UV-VIS method	SOP O-21 (EP 6.0)	Food supplements, premixes
122	Determination of vitamin D <sup>22)</sup> by HPLC/UV-VIS method	SOP O-26 (ČSN EN 12821)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
123	Determination of terpenes <sup>23)</sup> by GC/FID method	SOP 0-16 (Lachenmeier D., Absinthe – A Review: Critical Reviews in Food Science and Nutrition, 46:365-77(2006), Czech Pharmocopoeia as amended)	Food, spirits
124	Determination of vitamin K <sup>24)</sup> by HPLC/UV-VIS and HPLC/FLD method	SOP O-44 (Dietary Supplements Compendium, Haroon, Y: Chemical reduction system for the detection of phylloquinone and menaquinones,: J. Chrom.384 (1987), 383-389)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
125	Determination of antioxidants <sup>25)</sup> by HPLC/UV-VIS method	SOP O-19 (YMC Application Notes)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages
126-129	Reserved		
130	Determination of mycotoxins <sup>26)</sup> by ELISA method	SOP O-57 (Application Notes of R-Biofarm)	Food, food supplements, feedstuffs, premixes and agricultural products, beverages

Asterisk at the ordinal number identifies the tests, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

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If the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest edition of the specified procedure is used (including any changes).

Annex:

Flexible scope of accreditation

#### Ordinal numbers of tests

1-3,23, 38, 58, 59, 61, 62, 74, 75, 103, 109, 112, 113, 116-119, 122-125, 130

The Laboratory is allowed to modify the test methods listed in the Annex within the specified scope of accreditation provided the measuring principle is observed. The flexible approach to the scope of accreditation cannot be applied to the tests not included in the Annex.

Used abbreviations:			
SOP	Standard Operating Procedure		
OES-ICP	Inductively Coupled Plasma Optical Emission Spectrometer		
EP	European Pharmacopoeia		
FCC	Food Chemicals Codex		
AMA-254	Advanced Mercury Analyser		
AAS	Atomic Absorption Spectrometry		
ČL	Czech Pharmacopoeia		
ACS	American Chemical Society		
USP	United States Pharmacopeia		
HPLC	High-Performance Liquid Chromatography		
DAD	Diode Array Detector		
ELISA	Enzyme-Linked ImmunoSorbent Assay		
GC	Gas Chromatography		
FID	Flame Ionization Detector		
SAFA	Saturated Fatty Acids		
MUFA	Monounsaturated Fatty Acids		
PUFA	Polyunsaturated Fatty Acids		
TFA	Trans Fatty Acids		
FLD	Fluorescence Detector		
Coll.	Collection		
RID	Refractometric Detector		
ELSD	Evaporative Light Scattering Detector		

#### **Explanations:**

UV

VIS

Elements1) in the form of oxides, chlorides, sulphates by calculation from measured values

Water<sup>2)</sup> – drinking, surface, ground and waste water

Ultraviolet Detector

Visible Region Detector

Determined substances 3) - glutamine, carnitine, carnitine chloride, carnitine tartrate, nicotinamide, niacin, calcium pantothenate, creatine anhydrous, creatine monohydrate, aspartame, sodium glutamate, thiamine, thiamine hydrochloride, betaine, betaine hydrochloride, pyridoxine, alanine, arginine, glycine, isoleucine, leucine, lysine, metionine, phenylalanine, proline, tryptophan, valine, serine, tyrosine, threonine, histidine, lysine hydrochloride, pyridoxine hydrochloride, asparagine monohydrate

Saccharides 4) - reducing sugars, non-reducing sugars, sugars after inversion, maltose, lactose, saccharose, glucose, fructose Titrable acidity 5) - malic, oxalic, citric, tartaric, lactic, acetic, sulphuric, hydrochloric, formic, phosphoric acid, SH°, mmolH+, ml NaOH by calculation from measured values

Sulphur dioxide6 - sodium sulphite, hydrogen sulfite, sodium disulfite, potassium disulfite and potassium hydrogen sulphite by calculation from measured values

#### Accredited entity according to ČSN EN ISO/IEC 17025:2018:

#### EKOCENTRUM OVALAB, s.r.o.

EKOCENTRUM OVALAB Testing Laboratory Martinovská 3248/166, Martinov, 723 08 Ostrava

Iodine, iodide and iodate 7) – potassium iodide, potassium iodate, sodium iodate and calcium iodate by calculation from measured values

Organic fatty acids <sup>8)</sup> – SAFA - butanoic acids (C4:0), hexanoic acid (C6:0), octanoic acid (C8:0), n-decanoic acid (C10:0), undecanoic acid (C11:0), dodecanoic acid (C12:0), tridecanoic acid (C13:0), tetradecanoic acid (C14:0), pentadecanoic acid (C15:0), hexadecanoic acid (C16:0), heptadecanoic acid (C17:0), octadecanoic acid (C18:0), eicosanoic acid (C20:0), heneicosanoic acid (C21:0), docosanoic acid (C22:0), tricasanoic acid (C23:0), tetracosanoic acid (C24:0), MUFA - tetradecenoic acid (C14:1), cis-10-pentadecenoic acid (C15:1), hexadecenoic acid (C16:1), cis-10-heptadecenoic acid (C17:1), octadecenoic acid (C18:1n9c), cis-11-eicosenoic acid (C20:1), docosenoic acid (C22:1n9), tetracosenoic acid (C24:11n9), PUFA - octadecadienoic acid (C18:2n6c), octadecatrienoic acid (C18:3n6), octadecatrienoic acid (C18:3n3), eicosadienoic acid (C20:2), cis-8,11,14-eicosatrienoic acid (C20:3n6), cis-11,14,17-eicosatrienoic acid (C22:6n3), TFA - trans-9-octadecenoic (C18:1n9t), octadecadienoic acid (C18:2n6t), C18:3transisomers, Omega 3 - octadecatrienoic acid (C18:3n3), eis-11,14,17-eicosatrienoic acid (C20:3n3), eicosapentaenoic acid (C20:5n3), docosahexaenoic acid (C22:6n3), Omega 6 - octadecadienoic acid (C20:2), docosadienoic acid (C18:3n6), cis-8,11,14-eicosatrienoic acid (C20:3n6), eicosatetraenoic acid (C20:4n6), eicosadienoic acid (C20:2), docosadienoic acid (C22:2) Omega 9 - octadecenoic acid (C18:1n9c), docosenoic acid (C22:1n9), tetracosenoic acid (C24:11n9) and the calculation of the sums of SAFA, MUFA, PUFA, TFA, Omega 3, Omega 6 and Omega 9

Mycotoxins 9) - aflatoxins B1, B2, G1, G2, sum of aflatoxins, deoxynivalenol (DON), ochratoxin A and zearalenon

Specified substances 10) – saccharose, glucose, fructose, lactose, maltose, galactose, xylose, arabinose, mannose, inulin, sorbitol, manitol, maltitol, xylitol, glycerol, starch

Non-volatile substances 11) - sucralose, neotame, carnitine, calculation of carnitine chloride, carnitine tartrate

Organic acids <sup>12)</sup> – oxalic, tartaric, formic, malic, ascorbic, lactic, acetic, maleinic, citric, succinic, fumaric, acrylic, propionic, butyric, valeric, pyroracemic, lactic acid and calculation of their salts

Amino acids <sup>13)</sup> – alanine, asparagine, arginine, glutamine, glycine, isoleucine, aspartic acid, glutamic acid, leucin, lysine, methionine, phenylalanine, proline, tryptophan, valine, serine, tyrosine, threonine, histidine and calculation of their salts

Allergen 14) - gliadin, gluten

Vitamins A and E 15) - calculation of their esters

Preservatives 16) - benzoic acid, sorbic acid and calculation of their salts

Vitamin C 17) - ascorbic acid and calculation of its salts

Vitamins B 18) - vitamin B1 (thiamin), vitamin B2 (riboflavin), vitamin B6 (pyridoxine) and calculation of their salts

Sweeteners<sup>19)</sup> - acesulfame K, aspartame, saccharin

Sterols 20) - cholesterol

Carotenoids 21) - beta-carotene, lutein, lycopene, zeaxantin

Vitamins 22) - vitamin D2, vitamin D3

Terpenes <sup>23)</sup> – alpha thujone, beta thujone, menthol, eucalyptol, anethol

Vitamin K 24) - vitamin K1, vitamin K2

Antioxidants <sup>25)</sup> – butylhydroxyanisol, butylhydroxytoluene

Mycotoxins 26) - fumonisin

