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

MIBILA, spol. s r.o.

CAB number 1142, Chemical and Microbiological Laboratory U Ovčína 49, Nový Dvůr, 397 01 Písek

Tests:

| Ordinal number ¹ | Test procedure/ method name | Test procedure/ method identification ² | Tested object |
|-----------------------------|---|--|----------------------------|
| 1 | Enumeration of total microorganisms by culture method | ČSN EN ISO 4833-1; ČSN EN ISO 4833-2 | Food, feedstuffs |
| 2 | Enumeration of coliforms by culture method | ČSN ISO 4832 | Food, feedstuffs |
| 3 | Enumeration of yeasts and moulds by culture method | ČSN ISO 21527-1; ČSN ISO 21527-2 | Food, feedstuffs |
| 4 | Detection and enumeration of potentially toxinogenic moulds by culture (Aspergillus flavus, Aspergillus parasiticus) | AHEM 1/2003, SZÚ Guideline | Food, feedstuffs |
| 5 | Enumeration of coagulase- positive staphylococci (<i>St.</i> <i>aureus</i> and other species) Technique using Baird- Parker agar medium | ČSN EN ISO 6888-1 | Food, feedstuffs, raw milk |
| 6 | Detection of <i>Salmonella</i> by culture method | SOP M01 (ČSN EN ISO 6579-1) | Food, feedstuffs |
| 7 | Enumeration of Enterobacteriaceae by culture method | ČSN EN ISO 21528-2 | Food, feedstuffs |
| 8 | Enumeration of <i>Clostridium</i> perfringens by culture method | ČSN EN ISO 7937 | Food, feedstuffs |
| 9 | Enumeration of lactic acid bacteria by culture method | ČSN ISO 15214 | Meat, meat products |
| 10 | Enumeration of beta- glucuronidase-positive Escherichia coli by culture method | ČSN ISO 16649-2 | Food, feedstuffs |
| 11 | Detection of residues of beta-lactam antibiotics by plate diffusion method using <i>Bacillus stearothermophilus</i> varieta <i>calidolactis C 953</i> | SVS ČR National Reference Laboratory Guideline of 20.01.1999 | Meat, milk, eggs |
| 12 | Detection of residues of antibiotics and sulfonamides by four-plate method | SVS ČR National Reference Laboratory Guideline of 01.06.2008 | Meat, milk, eggs |
| 13 | Detection and enumeration of <i>Listeria monocytogenes</i> (incl. <i>Listeria</i> spp.) – | ČSN EN ISO 11290-1 | Food, feedstuffs |

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| Ordinal number ¹ | Test procedure/ method name | Test procedure/ method identification ² | Tested object |
|-----------------------------|---|--|----------------------------------|
| | detection method (culture method) | | |
| 14 | Enumeration of <i>Bacillus</i> cereus by culture | ČSN EN ISO 7932 | Food, feedstuffs |
| 15-19 | Reserved | | |
| 20 | Detection of <i>Salmonella</i> by culture method | ČSN ISO 19250 | Drinking, surface water |
| 21 | Enumeration of coagulase- positive staphylococci (Staphylococcus aureus and other species) Technique using Baird- Parker agar medium | Regulation 238/2011 Coll. as amended by Regulation 97/2014; ČSN EN ISO 6888-1 | Bathing water |
| 22 | Enumeration of culturable microorganisms at 22 °C | ČSN EN ISO 6222 | Drinking, bathing water |
| 23 | Enumeration of culturable microorganisms at 36 °C | ČSN EN ISO 6222 | Drinking, bathing water |
| 24 | Detection and enumeration of <i>Escherichia coli</i> and coliform bacteria Membrane filtration method | ČSN EN ISO 9308-1 | Drinking, bathing water |
| 25 | Detection and enumeration of thermotolerant coliform bacteria and <i>Escherichia coli</i> Membrane filtration method | ČSN 75 7835 | Surface water |
| 26 | Enumeration of <i>Clostridium</i> perfringens Membrane filtration method | ČSN EN ISO 14189 | Drinking, surface water |
| 27 | Detection and enumeration of intestinal enterococci Membrane filtration method | ČSN EN ISO 7899-2 | Drinking, bathing water |
| 28 | Detection and enumeration of the spores of sulfite- reducing anaerobes (Clostridia) Membrane filtration method | ČSN EN 26461-2 | Drinking, surface water |
| 29 | Detection and enumeration of <i>Pseudomonas aeruginosa</i> Membrane filtration method | ČSN EN ISO 16266 | Drinking, bathing water |
| 30 | Reserved | | |
| 31 | Determination of <i>Legionella</i> by culture method | ČSN EN ISO 11731 | Drinking, surface, bathing water |
| 32-39 40 | Reserved Enumeration of colony- forming units of yeasts | ČSN ISO 6611 | Milk, milk products |

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| Ordinal | Test procedure/ | Test procedure/ | Tested object |
|---------------------|--|---------------------------------------|--|
| number ¹ | method name | method identification ² | |
| | and/or moulds by culture method | | |
| 41 | Enumeration and detection | ČSN EN ISO 21149 | Cosmetics |
| | of living aerobic mesophilic | | |
| | bacteria by culture method | | |
| 42 | Detection of specified | ČSN EN ISO 22717; | Cosmetics |
| | microorganisms by culture | ČSN EN ISO 22718; | |
| | method | ČSN EN ISO 18416; | |
| | (Pseudomonas aeruginosa, | ČSN EN ISO 21150; | |
| | Staphylococcus aureus, | ČSN EN ISO 16212 | |
| | Candida albicans, E. coli, yeasts and moulds) | | |
| 43 | Detection of Salmonella by | AHEM 1/2008 | Sludge, waste water, soil, |
| 43 | culture method | 7 H IL IVI 1/2000 | bottom sediments, biomass ⁴ |
| 44 | Determination of microbial | ČSN EN ISO 18593 | Swabs, prints, deposits from |
| • • | contamination by culture | CSI (EI (ISO 100) S | production facilities |
| | contamination by culture | | environment |
| 45 | Enumeration of total | SOP SZÚ – ISSN 0862-5956, | Indoor air |
| | microorganisms and moulds | November 2001 | |
| | in air by aeroscope | | |
| 46 | Detection and enumeration | ČSN 75 7835; | Sludge, waste water, soil, |
| | of thermotolerant coliform | AHEM 1/2008 | bottom sediments, biomass ⁴ |
| | bacteria and Escherichia | | |
| | <i>coli</i> by culture method | | |
| 47 | Detection and enumeration | AHEM 1/2008, chap.2 | Sludge, waste water, soil, |
| | of intestinal enterococci | | bottom sediments, biomass ⁴ |
| 40.50 | Membrane filtration method | | |
| 48-59 | Reserved | COD | F1-4 |
| 60 | Determination of | SOP 6 (ČSN 46 7092-4, Javorský P., | Feedstuffs, food |
| | nitrogenous substances (raw protein) and nitrogen food | Krečmar F.: Chemical | |
| | by titration | analyses in agricultural | |
| | by titration | laboratories, Prague, 1987, | |
| | | 37-43) | |
| 61 | Determination of total | SOP 11 | Feedstuffs, food |
| J. | phosphorus by | (ČSN 46 7092-11, Javorský | |
| | spectrophotometry | P., Krečmar F.: Chemical | |
| | | analyses in agricultural | |
| | | laboratories, Prague 1987, | |
| | | 87-89) | |
| 62 | Determination of dry matter | SOP 15 | Feedstuffs |
| | by gravimetry, water content | (ČSN 46 7092-3) | |
| | and humidity by calculation | | |
| | from measured values | SOP 8A | Foodstuffs |
| 63 | Determination of chloride | | |

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| Ordinal | Test procedure/ | Test procedure/ | Tested object |
|---------------------|--|---|---|
| number ¹ | method name | method identification ² | |
| 64 | Determination of total fat content by gravimetry | SOP 29 (ČSN ISO 1443) | Meat, meat products |
| 65 | Determination of nitrate by spectrophotometry and nitrate nitrogen by calculation from measured values | SOP 31 (R. R. Elton-Bott: Analytica Chimica Acta 108 (1979) 285-291, AOAC Official method 935.48 Nitrates and Nitrites in meat | Meat, meat products |
| 66 | Determination of nitrite by spectrophotometry and nitrite nitrogen by calculation from measured values | SOP 33 (ČSN EN 26777) | Meat, meat products |
| 67 | Determination of dry matter by gravimetry, water content and moisture content by calculation from measured values | SOP 28 (ČSN 57 6021) | Meat, meat products and sterilized canned products |
| 68 | Determination of collagen by spectrophotometry and total protein by titration, determination of pure myosin by calculation from measured values | SOP 36 (ČSN ISO 937; AOAC Official Method 990.26 Hydroxyproline in meat and meat products, 1993) | Meat, meat products |
| 69 | Determination of boiling through by coagulation test | SOP 16 (Veterinary Laboratory Methods, SVS ČR, Bratislava, 1990) | Meat, meat products |
| 70 | Determination of starch by polarimetry | SOP 38 (ČSN 56 0512-16; ČSN 46 7092-21) | Meat, meat products ready made meals, cereals, feed |
| 71 | Determination of sugar by titration | SOP 39 (ČSN 56 0246-18; ČSN 56 0130-5; ČSN 56 0116-7; ČSN 56 0512-15; ČSN 46 7092-22) | Meat, meat products ready made meals, cereals, feed |
| 72 | Determination of fibre by commercial set | SOP 37 (Bioquant commercial set, Merck) | Meat, meat products ready made meals, cereals, feed |
| 73 | Determination of energy value by calculation from measured values | SOP 40 (Regulation (EU) No. 1169/2011 of the European Parliament and of the Council) | Meat, meat products ready made meals, cereals, feed |
| 74-79 | Reserved | | |

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| Ordinal number ¹ | Test procedure/ method name | Test procedure/ method identification ² | Tested object |
|--------------------------------|--|---|-----------------------------|
| 80 | Determination of pH by | SOP 4 | Drinking, surface, bathing, |
| | potentiometry | (ČSN ISO 10523) | waste water |
| 81 | Determination of chloride | SOP 9 | Drinking, surface, bathing, |
| | by titration | (ČSN ISO 9297) | waste water |
| 82 | Determination of total | SOP 10 | Drinking, surface, waste |
| | phosphorus and phosphate | (ČSN EN ISO 6878) | water |
| | by spectrophotometry | | |
| 83 | Determination of sulphate | SOP 12 | Drinking, surface, waste |
| | by gravimetry | (ČSN ISO 9280:1995) | water |
| 84 | Determination of dissolved | SOP 13 | Drinking, surface, waste |
| | solids by gravimetry | (ČSN 75 7346) | water |
| 85 | Determination of suspended | SOP 14 | Drinking, surface, waste |
| | solids by gravimetry | (ČSN EN 872) | water |
| 86 | Determination of anionic | SOP 3 | Drinking, surface, waste |
| | surfactants by measurement | (ČSN EN 903) | water |
| | of the methylene blue index | , | |
| | by spectrophotometry | | |
| 87 | Determination of nitrate by | SOP 26 | Drinking, bathing water |
| 0. | UV spectrophotometry | (Mertens-Massart: | |
| | The state of the s | Bull.Soc.Chim.Belgens 80, | |
| | | 151-158, year 1971) | |
| 88 | Determination of iron – | SOP 1 | Drinking, waste water |
| | spectrophotometric method | (ČSN ISO 6332, part a | 8, |
| | using 1,10-phenanthroline | total iron) | |
| 89 | Determination of | SOP 27 | Drinking, waste, bathing |
| | ammonium by | (ČSN ISO 7150-1) | water |
| | spectrophotometry and | | |
| | ammonia nitrogen by | | |
| | calculation from measured | | |
| | values | GOD 20 | |
| 90* | Determination of free and | SOP 20 | Drinking, bathing water |
| | total chlorine by HACH set | (HACH firm publication; | |
| | and bound chlorine by calculation from measured | ČSN EN ISO 7393-2) | |
| | values | | |
| 91* | Determination of | SOP 22 | Drinking, bathing, waste |
| 71' | temperature | (ČSN 75 7342) | water |
| 92 | Determination of nitrite by | SOP 32 | Drinking, waste water |
| 14 | spectrophotometry and | (ČSN EN 26777) | Dimking, waste water |
| | nitrite nitrogen by | (| |
| | calculation from measured | | |
| | values | | |
| 93 | Preliminary sensory | SOP 23 | Drinking water |
| | determination of odour and | (ČSN EN 1622; | |
| | flavour | ČSN 75 7340, chap. 9 and 10) | |
| 94 | Reserved | 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1 | |
| 95 | Titrimetric determination of | SOP 2 | Drinking water |
|)) | chemical oxygen demand | (ČSN EN ISO 8467) | |

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| Ordinal number ¹ | Test procedure/ method name | Test procedure/ method identification ² | Tested object |
|-----------------------------|--|---|--|
| | using permanganate (COD _{Mn}) | | |
| 96* | Determination of redox potential (ORP) by potentiometry | SOP 21 (ČSN 75 7367) | Drinking, bathing water |
| 97 | Determination of nitrogenous substances and nitrogen by titration according to Kjeldahl | SOP 7 (Javorský P., Krečmar F.: Chemical analyses in agricultural laboratories, Prague 1987, 37-43) | Waste water |
| 98 | Determination of biochemical oxygen demand (BOD ₅) by Hach probe | SOP 25 (ČSN EN ISO 5815-1; ČSN EN ISO 5814) | Waste water |
| 99 | Determination of nitrate by spectrophotometry and nitrate nitrogen, total nitrogen and inorganic nitrogen by calculation from measured values | SOP 30 (R.Elton-Bott: Analytica Chimica Acta 108 (1979) 285-291; Pitter P.: Hydro-chemistry 2009, 4th edition, 199 - 200) | Waste water |
| 100 | Determination of electrical conductivity | SOP 34 (ČSN EN 27888) | Drinking, bathing, waste water |
| 101 | Determination of chemical oxygen demand using dichromate (COD _{Cr}) | SOP 35 (ČSN ISO 15705) | Waste water |
| 102-109 | Reserved | | |
| 110 | Determination of chloride by titration | SOP 8B (ČSN ISO 1841-2) | Extracts ³ |
| 111 | Determination of dry matter by gravimetry, water content and humidity by calculation from measured values | SOP 24 (ČSN EN 14346:2007; ČSN EN 12880; ČSN EN ISO 18134-3; ČSN EN ISO 18134-2; ČSN 44 1377; ČSN ISO 687) | Sludge, waste, soil, sand, aggregate, timber, timber chips, saw dust, biomass ⁴ |
| 112 | Determination of gross calorific value by calorimetry | SOP 42 (ČSN ISO 1928; ČSN EN ISO 18125) | Coal, coke, timber, timber chips, saw dust, biomass ⁴ |
| 113 | Determination of copper, cadmium, lead, zinc, nickel and chromium by flame AAS method | SOP 43 (ČSN EN 16179; ČSN ISO 8288; Uniform working procedures, Testing of Fertilizers – ÚKZÚZ Brno 2012, Procedure No. 20060.1, 20101.1, 20100.1) | Sludge, waste, soil, sand, aggregates, biomass ⁴ |

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| Ordinal | Test procedure/ | Test procedure/ | Tested object |
|---------------------|---|--|--|
| number ¹ | method name | method identification ² | |
| 114 | Determination of net calorific value by calculation | SOP 44 (Regulation No. 145/2016 Coll.; ČSN ISO 1928; ČSN EN ISO 18125) | Coal, coke, timber, timber chips, saw dust, biomass ⁴ |

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

Sampling:

| Ordinal number | Sampling procedure name | Sampling procedure identification ¹ | Sampled object |
|-------------------|----------------------------------|--|-----------------------|
| 1 | Drinking and hot water | SOP V.17 | Drinking, hot water |
| | sampling | (Regulation No. 252/2004 Coll.; | |
| | | ČSN EN ISO 5667-1; | |
| | | ČSN EN ISO 5667-3; | |
| | | ČSN EN ISO 19458; | |
| | | ČSN ISO 5667-5; | |
| | | ČSN EN ISO 5667-14) | |
| 2 | Manual sampling of waste | SOP V.18 | Waste water |
| | water; | (ČSN EN ISO 5667-1; | |
| | sampling by an automatic sampler | ČSN EN ISO 5667-3; | |
| | | ČSN ISO 5667-10, chap. 4.2.1; | |
| | | ČSN EN ISO 5667-14) | |
| 3 | Bathing water sampling | SOP V.19 | Bathing water (pools) |
| | | (Regulation No. 238/2011 Coll.; | |
| | | ČSN EN ISO 5667-1; | |
| | | ČSN EN ISO 5667-3; | |
| | | ČSN EN ISO 19458; | |
| | | ČSN EN ISO 5667-14) | |
| 4 | Sampling of areas and | SOP V.20 | Areas and objects in |
| | object surfaces for the | (ČSN EN ISO 18593) | contact with food |
| | determination of microbial | | |
| | contamination | | |

² 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 valid edition of the specified procedure is used (including any changes)

³ aqueous extracts prepared according to valid legislation (Regulation 294/2005 Coll. and 61/2010 Coll.)

⁴ vegetable material for further technological processing

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| Ordinal number | Sampling procedure name | Sampling procedure identification ¹ | Sampled object |
|----------------|--|---|--|
| 5 | Sampling of bottom sediments | SOP V.21 (ČSN ISO 5667-12; | Bottom sediments |
| | | ČSN EN ISO 5667-15; | |
| | | MP MŽP ČR Sampling in Rehabilitation Geology) | |
| 6 | Sampling of sludge from sewage and water | SOP V.22 (ČSN EN ISO 5667-15; | Sludge |
| | treatment plants | MP MŽP ČR Sampling in Rehabilitation Geology) | |
| 7 | Sampling of solid materials and biomass | SOP V.23 (ČSN EN ISO 5667-13; ČSN EN ISO 5667-15; MP MŽP ČR Sampling in Rehabilitation Geology) | Soil, sand, aggregates, biomass ² |

¹ If the document identifying the sampling procedure is dated, only these specific procedures are used. If the document identifying the sampling procedure is not dated, the latest valid edition of the specified procedure is used (including any changes).

Used abbreviations:

AHEM Acta hygienica, epidemiologica et microbiologica (Name of publications of SZÚ Praha)

SOP Standard Operating Procedure SVS State Veterinary Administration

ÚKZÚZ Central Institute for Supervising and Testing in Agriculture

plant material for further technological processing