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- 1 Testing of food and feed
- 1.1 Physical, physico-chemical and chemical investigations
- 1.1.1 Determination of ingredients, additives, residues and contaminants by liquid chromatography and mass-selective detection (LC-MS-MS) in food and feed \*\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology   | Short title of the laboratory's internal SOP |
|---|--|--|
| SOP-No. 60                                    | Determination of tetracyclines in food using LC-MS-MS  |  |
| 2020-7  |  |  |
| SOP-No. 62<br>2016-09                         | Determination of β-agonists from milk and meat by LC-MS-MS   |  |
| SOP-No. 87                                    | Determination of histamine in food by LC-MS-MS   |  |
| 2020-06                                       |  |  |
| SOP-No. 90<br>2023-04                         | Determination of nitrofuran metabolites in milk products, meat, fish and egg by LC-MS-MS   |  |
| SOP-No. 91                                    | Determination of coccidiostats from food and feed-mineral  |  |
| 2020-07                                       | mixtures by LC-MS-MS   |  |
| SOP-No. 92                                    | Determination of quinolones in dairy products, meat, fish, egg   |  |
| 2023-06                                       | products and honey by LC-MS-MS   |  |
| SOP-No. 97                                    | Determination of Malachite Green in Fish by LC-MS-MS   |  |
| 2022-03                                       |  |  |
| SOP-No. 113                                   | Determination of fumagillin in honey by LC-MS-MS   |  |
| 2016-06                                       |  |  |
| SOP-No. 137                                   | Determination of levamisole in food by LC-MS-MS  |  |
| 2016-06                                       |  |  |
| SOP-No. 138                                   | Determination of mycotoxins in cereals according to Regulation   |  |
| 2021-11                                       | (EU) No. 2023/915 (QuEChERs). Determination of ochratoxin A in   |  |
|   | food via IAC determination of aflatoxin in foods according to Diet Ordinance using LC-MS-MS  |  |
| SOP-No. 142                                   | Determination of thiouracyls in food by LC-MS-MS   |  |
| 2016-09                                       | Determination of thiodracyis in 1904 by Le 1915 1915   |  |
| SOP-No. 144                                   | Determination of imidazoles from food by LC-MS-MS  |  |
| 2016-09                                       | , '  |  |
| SOP-No. 150<br>2023-04                        | Determination of per- and polyfluoroalkyl substances (PFAS) in fruits, vegetables, baby foods, milk, follow-on milk powder, cereals, fish and meat by LC-MS-MS |  |
| SOP-No. 195<br>2022-01                        | Determination of tropane alkaloids in cereals, soaps and creams by LC-MS-MS  |  |
| SOP-No. 196<br>2018-09                        | Determination of nicotine and cotinine in foods by LC-MS-MS  |  |
| SOP-No. 197<br>2016-07                        | Determination of nicotine in fungal products by LC-MS-MS   |  |
| SOP-No. 232                                   | Determination of glyphosate, AMPA and glufosinate in food and  |  |
| 2011-06                                       | feed by LC-MS-MS   |  |
| SOP-No. 253<br>2016-06                        | Determination of phenylbutazone in food by LC-MS-MS  |  |
| SOP-No. 323<br>2023-07                        | Determination of quaternary ammonium compounds (BAC 10-16, DDAC) in food, feed and consumer goods using LC-MS-MS (QuEChERS)  Restriction: here only food       |  |
| SOP-No. 484                                   | Determination of broad-spectrum antibiotics in dairy products,   |  |
| 2023-02                                       | meat, fish, egg and honey by LC-MS-MS  |  |

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| SOP-No. 496<br>2016-08 | Determination of guazatine acetate in bananas and citrus fruits   |  |
|------------------------|---|--|
| SOP-No. 498<br>2024-04 | Determination of solanine and chaconine in vegetables by LC-MS-MS   |  |
| SOP-No. 502<br>2017-03 | Determination of mycotoxins in high-fat matrices and dried fruit  |  |
| SOP-No. 508<br>2023-04 | Determination of alternaria toxins in cereals, fruit preparations and oil by LC-MS-MS   |  |
| SOP-No. 509<br>2016-11 | Determination of photoinitiators in food using LC-MS-MS   |  |
| SOP-No. 518<br>2022-04 | Determination of ergot alkaloids in cereals and cereal products by LC-MS-MS   |  |
| SOP-No. 524<br>2018-01 | Determination of Sialic Acid in dairy products and Infant formula by LC-MS-MS   |  |
| SOP-No. 529<br>2019-02 | Determination of shingomyelin in infant formulas after enzymatic reaction to phosphocholine by LC-MS-MS                       |  |
| SOP-No. 533<br>2018-03 | Determination of cucurbitacins in cucurbitaceae (zucchini, pumpkin, cucumber) and baby porridge using LC-MS-MS                |  |
| SOP-No. 541<br>2018-08 | Determination of furocoumarins in food by LC-MS-MS  |  |
| SOP-No. 543<br>2022-11 | Determination of acrylamide in dry, heated foods, packaging, hygiene products and paper using LC-MSMS                         |  |
| SOP-No. 545<br>2020-02 | Restriction: here only food  Determination of opium alkaloids in cereals and poppies using LC-MS-MS                           |  |
| SOP-No. 552<br>2021-12 | Determination of β-lactams in animal foods using LC-MS-MS   |  |
| SOP-No. 617<br>2023-06 | Determination of sulfonamides in meat, milk, dairy products and honey by LC-MS-MS   |  |
| SOP-No. 622<br>2022-11 | Determination of pyrrolizidine alkaloids in dry plant foods, spices and beverages using LC-MS-MS                              |  |
| SOP-No. 623<br>2023-03 | Determination of patulin in fruits and fruit preparations by LC-MS-MS   |  |
| SOP-No. 642<br>2021-12 | Determination of cannabinoids in plant parts and oils using LC-MS-MS  |  |
| SOP-No. 643<br>2021-12 | Determination of vanillin and vanilla contaminants in vanilla products and dairy products using LC-MS-MS                      |  |
| SOP-No. 650<br>2021-12 | Determination of sudan dyes and bixin in spices, oleoresin and sauces by LC-MS-MS   |  |
| SOP-No. 666<br>2022-05 | Melamine in dairy products and fruit preparations using LC-MS-MS  |  |
| SOP-No. 670<br>2022-11 | Determination of vitamin B1 (thiamine) in cereal-based baby food by LC-MS-MS  |  |
| SOP-No. 675<br>2023-03 | Determination of closantula in meat by LC-MS-MS   |  |
| SOP-No. 684<br>2023-10 | Determination of formaldehyde in aqueous extracts, adhesives, plastics, SAP, textiles and fruit and vegetables using LC-MS/MS |  |
|                        | (Restrictions: here only fruit and vegetables)  |  |





| SOP-No. 685<br>2023-08    | Selected veterinary medicinal products in milk by LC-MS-MS   |  |
|---------------------------|--|--|
| SOP-No. 690<br>2023-09    | Determination of polyamines in cereal gems using LC-MS-MS  |  |
| SOP-No. 692<br>2023-11    | Determination of avermectins in milk using LC-MSMS   |  |
| DIN EN 15662<br>2018-07   | Plant-based foods – Multi-method for the determination of pesticide residues with GC and LC after acetonitrile extraction/distribution and purification with dispersive SPE – Modular QuEChERS method (Modification: Analysis here only with LC-MS-MS)     | SOP-No. 117<br>2020-06                           |
| EURL-SRM QuPPE<br>2019-05 | Quick method for the analysis of numerous highly polar pesticides in food involving extraction with acidified methanol and LC-MS/MS measurement (QuPPE-PO-Method)  (Modification: column, running medium; Extension: Method 4.1 to matrine and oxymatrine) | SOP-No. 495<br>2022-10<br>SOP-No. 657<br>2023-08 |



## 1.1.2 Determination of ingredients and contaminants by gas chromatography with conventional detectors (GC-FID) in food and feed\*\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology | Short title of the laboratory's internal SOP |
|---|--|--|
| DGF C-VI 10a                                  | Gas chromatography: analysis of fatty acids and fatty acid                         | SOP-No. 512                                  |
| 2000  | distribution   | 2021-05                                      |
|   | (Modification: Extraction)   |  |
| SOP-No. 418                                   | Determination of mineral oil (MOSH & MOAH) in food by means                        |  |
| 2021-06                                       | of online coupled LC-GC-FID  |  |
| SOP-No. 525                                   | Determination of Cholesterol in fat, oil and milk products by GC-                  |  |
| 2022-01                                       | FID  |  |

## 1.1.3 Determination of ingredients, residues and contaminants by gas chromatography with mass-selective detection (MS, MS/MS) in food and feed\*\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology  | Short title of the laboratory's internal SOP |
|---|---|--|
| DIN EN 15662                                  | Plant-based foods - multi-method for the determination of   | SOP-No. 117                                  |
| 2018-07                                       | pesticide residues with GC and LC after acetonitrile extraction/distribution and purification with dispersive SPE - Modular QuEChERS method | 2020-06                                      |
| COD N. 22                                     | (Modification: Analysis here only with GC-MS-MS)  |  |
| SOP-No. 23<br>2022-01                         | Determination of alkylphenols, alkylphenol ethoxylates and bisphenols from food by GC-MSD   |  |
| SOP-No. 33<br>2001-10                         | Determination of musk compounds in oils, liquids using GC-MSD   |  |
| SOP-No. 42<br>2023-03                         | Determination of flame retardants in foodstuffs using GC-MSD  |  |
| SOP-No. 72<br>2022-02                         | Determination of furan in food by HS-GC-MSD   |  |
| SOP-No. 73<br>2020-02                         | Determination of residual solvents in foodstuffs using HS GC-MSD  |  |
| SOP-No. 109<br>2023-08                        | Determination of EC and EPA PAHs in food and feed by GC-MSD   |  |
| SOP-No. 121<br>2006-04                        | Determination of epoxidized soybean oil (ESBO) in food and consumer goods by GC-MSD (Deviation: here only food)                             |  |
| SOP-No. 132<br>2022-01                        | Determination of phthalic acid esters and adipates in food by GC-MSD  |  |
| SOP-No. 158<br>2008-07                        | Determination of pesticides in spices by GC-MSD and LC-MS-MS (Restriction: here only GC-MSD)  |  |
| SOP-No. 259<br>2011-03                        | Determination of carnauba wax from fruit surfaces (leaching) by GC-MS   |  |
| SOP-No. 303<br>2014-01                        | Determination of phenoxycarboxylic acids in food by GC-MSD (CI)   |  |
| SOP-No. 364<br>2013-08                        | Determination of ethylhexanoic acid in food samples by GC-MSD   | SOP-No. 71<br>2005-04                        |
| SOP-No. 367                                   | Determination of oestrogens and phytoestrogens in food and  | SOP-No. 74                                   |





| 2013-08          | feed using GC-MSD  | 2005-04     |
|------------------|--|-------------|
| SOP-No. 368      | Determination of fattening aids in food and feed using GC-MSD              | SOP-No. 76  |
| 2013-08          |  | 2005-04     |
| SOP-No. 370      | Determination of stilbens in food and feed by GC-MSD                       | SOP-No. 98  |
| 2013-08          |  | 2005-04     |
| SOP-No. 557      | Determination of phenol and chlorophenols from food by GC-                 |             |
| 2023-06          | MSD  |             |
| SOP-No. 559      | Determination of phosphane in food by HS-GC-MSD                            |             |
| 2023-12          |  |             |
| SOP-No. 636      | Determination of ethylene oxide in cereals using headspace                 |             |
| 2022-04          | GC-MSD   |             |
| SOP-No. 647      | Determination of residual solvents by means of headspace GC-               |             |
| 2021-05          | MSD based on JECFA   |             |
| SOP-No. 653      | Determination of ethylene oxide and 2-chloroethanol in                     |             |
| 2023-11          | foodstuffs using GC-MSMS   |             |
| SOP-No. 691      | Determination of heptachlor and heptachlor epoxide in fish                 |             |
| 2023-10          | and fish products using GC-MSMS  |             |
| EU VO 2017/644   | Determination of sampling and analytical methods for the                   | SOP-No. 227 |
| 2017-04          | control of levels of dioxins and dioxin-like PCBs in certain foodstuffs    | 2023-09     |
| EU VO 2017/771   | Determination of sampling and analytical methods for the                   | SOP-No.227  |
| 2017-05          | control of levels of dioxins and dioxin-like PCBs in certain feedingstuffs | 2023-09     |
| DGF C-VI 10a     | Gas chromatography of fatty acid methyl esters                             | SOP-No. 512 |
| 2000             | (Modification: Extraction; Extension to animal processes)                  | 2021-05     |
| DGF C-VI 18(10)  | Fatty acid-bound 3-chloropropane-1,2-diol (3-MCPD ester) and               | SOP-No. 534 |
| 21. Auflage 2015 | 2,3-epoxypropan-1-ol (glycidol). Determination in fats and oils            | 2020-12     |
|                  | by GC-MS (Difference Method)   |             |
| ASU L 00.00-36/2 | Determination of bromide residues in low-fat foods – Part 2:               | SOP-No. 120 |
| 2004-07          | Determination of inorganic bromide   | 2006-04     |
| ASU L 00.00-49/2 | Examination of foodstuffs - Low-fat foods - Determination of               | SOP-No. 578 |
| 1999-11          | residues of dithiocarbamate and thiuram disulfide - Part 2: Gas            | 2023-06     |
| - 2              | chromatographic method (Modification: <i>Detector MSD</i> ;                |             |
|                  | Reduction of reaction approach 1:10; Headspace Sampler;                    |             |
|                  | Incubation at 90°C)  |             |

## 1.1.4 Determination of contaminants by high-resolution gas chromatography / high-resolution mass spectrometry (HRGC HRMS) in food and feed

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology   | Short title laboratory's SOP                 | of the internal |
|---|--|--|-----------------|
| EU VO 2017/644<br>2017-04                     | Determination of sampling methods and analytical methods for the control of levels of dioxins and dioxin-like PCBs in certain foodstuffs     | <del>SOP-Nr. 227</del><br><del>2023-09</del> |                 |
| EU VO 2017/771<br>2017-05                     | Determination of sampling methods and methods of analysis for the control of levels of dioxins and dioxin-like PCBs in certain feedingstuffs | <del>SOP-Nr.227</del><br><del>2023-09</del>  |                 |
| <del>SOP-No. 559</del><br><del>2023-12</del>  | Determination of phosphane in food using HS-GC-MSD   |  |                 |



## 1.1.5 Determination of ingredients and additives using high-performance anion exchange chromatography (HPAEC) in food

| Standard/in House        | Analyte title of the standard or in-house method Information | Short title of the        |
|--------------------------|--|---------------------------|
| Procedure/ Date of Issue | on testing technology  | laboratory's internal SOP |
| SOP-No. 248              | Determination of galactooligosaccharides (GOS) in baby food  |                           |
| 2023-11                  | using HPAEC-PAD  |                           |
| SOP-No. 569              | Determination of sugars in foods using HPAEC-PAD             |                           |
| 2023-11                  |  |                           |
| AOAC 2001.02             | Determination of trans-galactooligosaccharides (TGOS) in     | SOP-No. 522               |
| 2002                     | selected food products                                       | 2023-11                   |
|                          | (Restriction: here only examination of GOS raw materials)    |                           |

## 1.1.6 Determination of elements in food and feed using inductively coupled plasma mass spectrometry (ICP-MS) \*\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology   | Short title of the laboratory's internal SOP |
|---|--|--|
| SOP-No. 81<br>2021-01                         | Determination of methylmercury in food, feed by distillation /ICP-MS   |  |
| DIN EN 16802<br>2016-07                       | Food - Determination of elements and their compounds -<br>Determination of inorganic arsenic in foods of marine origin and<br>plant foods with anion exchange HPLC-ICP-MS  | SOP-No. 458<br>2023-11                       |
|   | (Extension: Matrix here also feed)   |  |
| DIN EN ISO 17294-2<br>2024-03                 | Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 2: Determination of selected elements including uranium isotopes (Modification: analytes here also Ta; Investigation also of digestion solutions of food and feed) | SOP-No. 53<br>2023-07                        |
| ASU L 00.00-93<br>2008-12                     | Examination of foodstuffs - determination of iodine in food; ICP-MS procedure  | SOP-No. 160<br>2020-08                       |

#### 1.1.7 Determination of ingredients and key figures by means of titrimetric tests in food \*

| -                           | Analyte title of the standard or in-house method Information on testing technology  | Short title of the laboratory's internal SOP |
|-----------------------------|---|--|
| ASU L 00.00-46/1<br>1999-11 | Testing of foodstuffs - Determination of sulphites in foodstuffs - Part 1: Optimized Monier-Williams method                             | SOP-No. 256<br>2023-01                       |
| ASU L 01.00-10/1<br>2016-03 | testing of foodstuffs; Determination of the nitrogen content of milk according to Kjeldahl and calculation of the crude protein content | SOP-No. 361<br>2019-12                       |



| ASU L 06.00-7  | Examination of foodstuffs – Determination of the crude protein    | SOP-No. 409 |
|----------------|---|-------------|
| 2014-08        | content in meat and meat products – Kjeldahl titrimetric          | 2019-12     |
|                | method – Reference method (Modification: Matrix here also         |             |
|                | fish)   |             |
| ASU L 15.00-3  | Determination of nitrogen content and calculation of crude        | SOP-No. 435 |
| 2007-12        | protein content of cereals and legumes                            | 2020-01     |
| ASU L 13.00-5  | Examination of foodstuffs – determination of the acidity and      | SOP-No. 299 |
| 2012-01        | acidity of animal and vegetable fats and oils                     | 2018-05     |
| ASU L 13.00-10 | Examination of foodstuffs - Animal and vegetable fats and oils -  | SOP-No. 583 |
| 2019-07        | Determination of iodine number                                    | 2013-08     |
| ASU L 13.00-37 | Examination of foodstuffs - Determination of peroxide count in    | SOP-No. 300 |
| 2018-06        | animal and vegetable fats and oils - Iodimetric (visual) endpoint | 2019-10     |
|                | determination   |             |
| IFU 3          | Titratable acidity  | SOP-No. 289 |
| Rev. 2017      |   | 2023-01     |
| IFU 30         | Determination of formol number                                    | SOP-No. 289 |
| Rev. 2005      |   | 2023-01     |
| SOP-No.567     | Total protein in fruits and vegetables (and their products)       |             |
| 2019-09        |   |             |
| SOP-No. 659    | Determination of fat ratios in animal and vegetable fats and oils |             |
| 2023-01        | (automatic titration)   |             |

## 1.1.8 Determination of ingredients and additives by means of photometric tests in foodstuffs \*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology                      | Short title of the laboratory's internal SOP |
|---|---|--|
| SOP-No.410                                    | Enzymatic detection of ethanol  |  |
| 2021-03                                       |   |  |
| IFU 21  | Determination of L-malic acid (enzymatic)   | SOP-No. 306                                  |
| Rev.2005                                      |   | 2015-08                                      |
| IFU 22  | Determination of citric acid (enzymatic)  | SOP-No. 306                                  |
| Rev.2005                                      |   | 2015-08                                      |
| IFU 49  | Determination of proline  | SOP-No. 291                                  |
| Rev.2005                                      |   | 2020-01                                      |
| IFU 52  | Determination of alcohol (enzymatic)  | SOP-No. 410                                  |
| Rev.2005                                      |   | 2021-03,                                     |
|   |   | SOP-No. 290                                  |
|   |   | 2015-08                                      |
| IFU 53  | Determination of lactic acid (enzymatic)  | SOP-No. 306                                  |
| Rev.2005                                      |   | 2015-08                                      |
| IFU 54  | Determination of D-isocitric acid (enzymatic)   | SOP-No. 306                                  |
| Rev.2005                                      |   | 2015-08                                      |
| IFU 55  | Determination of glucose und fructose (enzymatic)   | SOP-No. 306                                  |
| Rev.2005                                      |   | 2015-08                                      |
| IFU 56  | Determination of sucrose (enzymatic)  | SOP-No. 306                                  |
| Rev.2005                                      |   | 2015-08                                      |
| IFU 62  | D-Sorbitol (enzymatic)  | SOP-No. 290                                  |
| Rev.2005                                      |   | 2015-08                                      |
| ASU L 06.00-8                                 | Determination of hydroxyproline content in meat and meat  | SOP-No. 582                                  |
| 2017-10                                       | products  | 2022-07                                      |
| ASU L 08.00-14                                | Examination of foodstuffs – Determination of nitrate and nitrite  | SOP-No. 127                                  |
| 2008-06                                       | content in sausage products after enzymatic reduction of nitrate to nitrite – Spectrophotometric method | 2007-05                                      |



| ASU L 02.00-12 | Determination of foodstuffs - Determination of the content of | SOP-No. 397 |
|----------------|---|-------------|
| 2009-06        | sucrose and glucose in milk products and ice-cream products - | 2019-12     |
|                | Enzymatic method  |             |
| ASU L 01.00-17 | Food Testing – Determination of Lactose and Galactose Content | SOP-No. 398 |
| 2010-09        | of milk and dairy products                                    | 2019-12     |

## 1.1.9 Determination of ingredients by means of gravimetric tests in food and feed\*

| Standard/in House<br>Procedure/ Date of Issue       | Analyte title of the standard or in-house method Information on testing technology  | Short title of the laboratory's internal SOP |
|---|---|--|
| SOP-No. 485<br>2019-12                              | Determination of water, ash and fat content in coconut milk powder  |  |
| SOP-No. 646<br>2021-05                              | total ash and acid-insoluble ash in spices and seasoning ingredients  |  |
| ISO 659<br>2009-07                                  | oilseeds – Determination of oil content (Modification: grinding, extraction time)   | SOP-No. 513 2018-<br>05                      |
| ISO 665<br>2000-09                                  | Oilseeds – Determination of moisture and volatile matter content  | SOP-No. 436<br>2019-12                       |
| ISO 24557<br>2009-10                                | Pulses – Determination of moisture content – Air oven method  | SOP-No. 591<br>2019-10                       |
| UNECE Standard DDP-11<br>1992                       | UNECE Standard DDP-11 concerning the marketing and commercial quality control of dried grapes – Annex I:  Determination of the moisture content of dried fruit  | SOP-No. 241<br>2010-06                       |
| ASU F 0001<br>2010-09                               | Testing of feedingstuffs - Determination of moisture content in feedingstuffs - Annex III to Commission Regulation (EC) No 152/2009 of 27 January laying down the methods of sampling and analysis for the official examination of feedingstuffs OJ L 54/1 of 26.02.2009) | SOP-No. 676<br>2023-03                       |
| ASU L 00.00-18<br>1997-01Correction<br>2002-12      | Food Testing – Determination of Dietary Fibre in Food   | SOP-No. 351<br>2022-10                       |
| ASU L 01.00-9<br>2012-01                            | testing of foodstuffs; - Determination of fat content in milk; - Gravimetric method (reference method)  | SOP-No. 353<br>2019-12                       |
| ASU L 01.00-20<br>2022-04                           | Examination of foodstuffs – Determination of the fat content of milk and dairy products using the gravimetric Weibull-Berntrop method   | SOP-No. 352<br>2019-12                       |
| ASU L 01.00-27<br>1988-12                           | Examination of foodstuffs - Determination of the dry matter content of milk and cream (cream); (Reference procedure)  | SOP-No. 346<br>2019-12                       |
| ASU L 01.00-77<br>2002-05                           | Food Testing – Determination of total ash from milk and dairy products  | SOP-No. 355<br>2019-12                       |
| ASU L 02.06-E(EG) und<br>1(EG) bis 8(EG)<br>1981-01 | Methods of analysis of the composition of certain partially or wholly dried preserved dairy products Method 2: Determination of water content   | SOP-No. 563<br>2019-07                       |
| ASU L06.00-3<br>2014-08                             | Examination of foodstuffs - Determination of water content in meat and meat products - Gravimetric method - Reference method  | SOP-No. 244<br>2019-12                       |
|   | (Modification: Matrix here also fish)   |  |
| ASU L 06.00-04<br>2017-10                           | Examination of foodstuffs – determination of ash in meat and meat products  (Modification: <i>Matrix here also fish</i> )   | SOP-No. 354<br>2019-12                       |





| ASU L 06.00-06  | Examination of foodstuffs – Determination of the total fat content  | SOP-No. 350            |
|---|---|------------------------|
| 2014-08   | in meat and meat products – Gravimetric method according to Weibull-Stoldt reference method (modification: matrix here also fish)                         | 2021-01                |
| ASU L15.00-07<br>2012-01                              | Examination of foodstuffs – determination of ash content in cereals, legumes and by-products by combustion  | SOP-No. 539<br>2018-07 |
| ASU L 16.01-01  | Determination of moisture content in cereal flour   | SOP-0589               |
| 2008-12   |   | 2019-12                |
| ASU L 16.00-05  | Examination of foodstuffs – Determination of total fat content in   | SOP-No. 564            |
| 2017-10   | cereal products after acid digestion by extraction and gravimetry   | 2019-09                |
| ASU L 31.00-04<br>1997-01                             | Testing of foodstuffs – Determination of ash in fruit and vegetable juices  | SOP-No. 576<br>2019-10 |
| ASU L 31.00-18<br>1997-09                             | Examination of foodstuffs – Determination of dry matter in fruit and vegetable juices – Gravimetric method with loss of mass during drying (Modification: | SOP-No. 571<br>2019-12 |
|   | <ol> <li>drying parameters;</li> <li>Weighing</li> <li>Matrix here also purees, puree and juice concentrates, dried fruits)</li> </ol>                    |                        |
| ASU L 39.00- E(EG) und<br>1(EG) bis 10(EG)<br>1981-01 | Analytical methods for determining the composition of certain sugars intended for human consumption Method 1: Determination of mass loss by drying        | SOP-No. 563<br>2019-07 |
| ASU L 44.00-4<br>1985-12                              | Examination of foodstuffs - Determination of total fat content in chocolate (Modification: hydrolysis, extraction)  | SOP-0566<br>2019-11    |
| ASU L 53.00-4   | Examination of foodstuffs – Examination of spices and seasoning   | SOP-No. 646            |
| 1996-02   | ingredients – Determination of total ash and acid-insoluble ash   | 2019-10                |
| DGF B-II 3<br>1987                                    | Water and volatile constituents in animal feed  |                        |
| IFU 36  | Determination of sulphate   | SOP-No. 274            |
| 2005  |   | 2023-10                |
| IFU 60<br>2005  | Determination of centrifugable pulp in fruit juices (Modification: vessels, centrifugation, measurement of measured values)                               | SOP-No. 542<br>2018-09 |
| VDLUFA III 3.1<br>1976                                | Determination of moisture in feed and cereals   | SOP-No. 243<br>2010-07 |
| SOP-No. 585<br>2019-11                                | Determination of dry matter in food   |                        |
| SOP-No. 586   | Determination of total ash in food  |                        |
| 2019-11   |   |                        |
| SOP-No. 587<br>2019-11                                | Determination of total fat content in food  |                        |
| SOP-No. 588   | Determination of total protein in food  |                        |
| 2019-11   |   |                        |
| SOP-No. 651   | Determination of water and ash content in various food matrices   |                        |
| 2022-01   | (prepASH)   |                        |



## 1.1.10 Further physico-chemical investigations

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology  | Short title of the laboratory's internal SOP |
|---|---|--|
| ASU L 26.00-1<br>2018-10                      | Testing of foodstuffs – Determination of nitrate content in vegetable products – HPLC/IC method (modification: precolumn omitted) | SOP-No. 570<br>2020-08                       |
| ASU L 31.00-2<br>1997-01                      | Examination of foodstuffs - Determination of the pH of fruit and vegetable juices   | SOP-No. 203<br>2022-01                       |
| IFU 1A<br>Rev. 2005                           | Relative density (Method using density meter)   | SOP-No. 288<br>2023-01                       |
| IFU 8<br>Rev. 2017                            | Determination of soluble solids (indirect method by refractometry)  | SOP-No. 288<br>2023-01                       |
| SOP-No. 473<br>2022-01                        | Determination of oligosaccharides in milk and milk powders by HPLC-FLD  |  |
| SOP-No. 544<br>2018-09                        | Determination of viscosity according to Bostwick  |  |





## 1.2 Determination of allergens and residues of pharmacologically active substances by enzyme immunoassay (ELISA) in food\*

| Standard/in House Procedure/ Date of Issue                                      | Analyte title of the standard or in-house method Information on testing technology  | Short title of the laboratory's internal SOP |
|---|---|--|
| Neogen Veratox for Gliadin R5 (Quantitativ), Rev. 8510 2014-01                  | Immunological determination of gliadin in food by ELISA (test kit) (modification: wavelength 450 nm, colorless sulfuric acid, reduction of the incubation period to 9 min)                          | SOP-No. 172<br>2015-04                       |
| Neogen<br>Veratox für Senf<br>(Quantitativ)<br>Artikel 8400<br>2018-05          | Immunological determination of mustard allergen content in food using ELISA (test kit) (Modification: wavelength 450 nm, colorless sulfuric acid, reduction of the incubation period to 6 min)      | SOP-No. 319<br>2018-08                       |
| Neogen Veratox für Eiallergen (Quantitativ) Artikel 8450 2018-05                | Immunological determination of the chicken egg allergen content in food by ELISA (test kit) (modification: wavelength 450 nm, colorless sulfuric acid, reduction of the incubation period to 8 min) | SOP-No. 401<br>2020-09                       |
| Neogen<br>Veratox für Milchallergen<br>(Quantitativ)<br>Artikel 8470<br>2018-05 | Immunological determination of milk allergen content in food by ELISA (test kit) (Modification: wavelength 450 nm, colorless sulfuric acid, reduction of incubation time to 9 min)                  | SOP-No. 488<br>2021-02                       |
| Euro Proxima<br>Neomycin ELISA<br>Artikel 5111NEO<br>2011-10                    | Immunological determination of neomycin in food by ELISA (test kit)   | SOP-No. 219<br>2016-10                       |
| Euro Proxima<br>Gentamycin ELISA<br>Artikel 5111GEN<br>2020-04                  | Immunological determination of gentamicin in food by ELISA (test kit)   | SOP-No. 220<br>2021-02                       |
| Euro Proxima Artikel 5111STREP 2020-04  | Immunological determination of streptomycin in food by ELISA (test kit)   | SOP-No. 226<br>2021-01                       |



# 1.3 Determination and detection of bacteria, yeasts and moulds by means of cultural microbiological tests in food\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology  | Short title of the laboratory's internal SOP |
|---|---|--|
| ASU L 00.00-20<br>2021-07                     | Examination of foodstuffs - Horizontal method for the detection, counting and serotyping of salmonella - Part 1: Detection of salmonella spp. (adoption of the standard of the same name DIN EN ISO 6579-1, 2020-08)            | SOP-No. 577<br>2022-07                       |
| ASU L 00.00-22                                | Examination of foodstuffs - Horizontal method for the detection   | SOP-No. 574                                  |
| 2018-03                                       | and counting of - Listeria monocytogenes and Listeria spp Part 2: Counting method (adoption of the standard of the same name DIN EN ISO 11290-2, September 2017)  | 2023-01                                      |
| ASU L 00.00-25                                | Determination of presumptive Bacillus cereus in food - Colony   | SOP-No. 596                                  |
| 2011-01                                       | counting method   | 2023-01                                      |
| ASU L 00.00-32/1                              | Testing of foodstuffs - Horizontal method for the detection and   | SOP-No.575                                   |
| 2018-03                                       | counting of - Listeria monocytogenes and Listeria spp Part 1:<br>Detection methods (adoption of the eponymous standard DIN<br>EN ISO 11290-1, September 2017)   | 2023-01                                      |
| ASU L 00.00-55                                | Method for the counting of coagulase-positive staphylococci   | SOP-No. 594                                  |
| 2004-12                                       | (Staphylococcus aureus and other species) in food, Part 1:<br>Method with Baird Parker Agar (according to DIN EN ISO 6888-1)  | 2023-01                                      |
| ASU L 00.00-57                                | Method for counting Clostridium perfringens in food - colony  |  |
| 2006-12                                       | counting method (according to DIN EN ISO 7937)  |  |
| ASU L 00.00-88/1<br>2023-04                   | Examination of foodstuffs – Horizontal method of counting microorganisms – Part 1: Colony counting at 30 °C using the cast plate method (according to DIN EN ISO 4833-1:2013-12)  | SOP-No. 606<br>2023-01                       |
| ASU L 00.00-88/2<br>2023-04                   | Horizontal method for counting microorganisms - Part 2: Colony counting at 30 °C by surface method (according to DIN EN ISO 4833-2:2014-05)   | SOP-No. 607<br>2023-01                       |
| ASU L 00.00-91<br>2006-12                     | Food Testing – Horizontal method for the detection of shigella spp. in Food   |  |
| ASU L 00.00-107<br>2007-04                    | Horizontal method for the detection and counting of campylobacter spp. in food - Detection method (according to DIN EN ISO 10272-1)   |  |
| ASU L 00.00-132/2<br>2021-03                  | Examination of foodstuffs - Horizontal method for counting ß-glucuronidase-positive E. coli in foodstuffs - Part 2: Colony counting method with 5-bromo-4-chloro-3-indole-ß-D-glucuronide (according to DIN ISO 16649-2:2009-12 | SOP-No. 579<br>2023-01                       |
| ASU L 00.00-133/1<br>2018-03                  | Examination of foodstuffs - Horizontal method for the detection and counting of Enterobacteriaceae in foodstuffs - Part 1: MPN technique (according to DIN ISO 21528-1)   |  |
| ASU L 00.00-133/2<br>2019-12                  | Examination of foodstuffs – Horizontal method for the detection and counting of Enterobacteriaceae in foodstuffs – Part 2: Colony counting technique (according to DIN ISO 21528-2:2019-05)                                     | SOP-No. 593<br>2019-12                       |
| ASU L 01.00-3<br>1987-03                      | Food testing – determination of coliform bacteria in milk, dairy products, butter, cheese and ice cream; Solid Medium Method  | SOP-No. 580<br>2023-01                       |



| ASU L 01.00-25<br>1997-09 | Examination of foodstuffs - Determination of Escherichia coli in milk, dairy products, butter, cheese and ice cream - Method with liquid culture medium |                        |
|---------------------------|---|------------------------|
| ASU L 01.00-37            | ,   | SOP-No. 595            |
| 1991-12                   | molds in milk and dairy products; Reference Procedure   | 2023-01                |
|                           | (Modification: here also examination of other foodstuffs; Spiral Lamps)   |                        |
| ASU L 02.07-2<br>1987-03  | Testing of foodstuffs - Determination of coagulase-positive staphylococci in dried milk products and processed cheese, method with selective enrichment |                        |
| ASU L 06.00-25            | Determination of enterobacteriaceae in meat – drip plate method (according to DIN 10164)  |                        |
| 1987-11                   |   |                        |
| ASU L 06.00-32            | Examination of foodstuffs - determination of Enterococcus   |                        |
| 1992-06t                  | faecalis and Enterococcus faecium in meat and meat products;<br>Spatula method (reference method) (according to DIN 10106)                              |                        |
| ASU L 06.00-35            | Determination of aerobic lactic acid bacteria in meat and meat  |                        |
| 1992-12                   | products (according to DIN 10109)   |                        |
| ASU L 06.00-39            | Determination of mesophilic sulphite-reducing clostridia in meat  |                        |
| 2017-10                   | and meat products   |                        |
|                           | (according to DIN 10103)  |                        |
| ASU L 06.00-43            | Census of Pseudomonas spp. In meat and meat products  |                        |
| 2011-06                   | (according to DIN 13720)  |                        |
| VDLUFA VI M 7.13          | Determination of thermodry (thermoresistant) microorganisms   |                        |
| 1996                      | (deviation: Columbia blood agar culture medium, anaerobic incubation at 37°C for the detection of thermoresistant                                       |                        |
|                           | streptococci)   |                        |
| VDLUFA VI M 7.23.2        | Determination of acetic acid bacteria, colony counting method   |                        |
| 2010                      | with universal beer agar  |                        |
| ISO/TS 22964:2017-04      | Qualitative detection of Cronobacter spp. (Enterobacter sakazakii) in milk and dairy products   | SOP-No. 280<br>2011-09 |
| IELL Method No. 3 II      | Quantitative determination of osmotolerant yeasts in food   | SOP-No. 260            |
| 1996-04                   | (original title: Osmophilic-osmoduric yeasts typs –   | 2023-01                |
|                           | "Osmotolerants" count)  |                        |
| IFU Method No. 4, III.,   | Method for the detection of spores of heat-resistant moulds   |                        |
| 1996-04                   | (original title: Heat-resistant moulds spore detection)   |                        |
| 1                         | Method for the detection of xerophilic moulds (original title:  |                        |
| 1996-04                   | Xerophilic moulds count)  |                        |
| IFU Method No.12          | Method on the detection of taint producing alicyclobacillus in  | SOP-No. 464            |
| 2019-04                   | fruit juices  | 2022-10                |
| SOP-No. 489               | Qualitative detection of presumptive methicillin-resistant  |                        |
| 2023-02                   | Staphylococcus aureus in food; according to EURL-AMR  |                        |
| SOP-No. 494               | Detection of broad-spectrum $\beta$ -lactamase-producing  |                        |
| 2023-02                   | Enterobacteriaceae in food by means of screenings   |                        |

## 1.4 Hygrometric determinations

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology | Short title of the laboratory's internal SOP |
|---|--|--|
| ISO 21807                                     | Microbiology of food and feed - Horizontal method for                              | SOP-No. 404                                  |
| 2004-09                                       | determining water activity   | 2014-03                                      |



## 1.5.1 Molecular Biological Investigations

## 1.5.2 Detection of specific DNA sequences and identification of animal species by real-time PCR in food and feed\*

| Standard/in House            | Analyte title of the standard or in-house method Information on  | Short title of the        |
|------------------------------|--|---------------------------|
| Procedure/ Date of Issue     | testing technology   | laboratory's internal SOP |
| ASU L 00.00-31               | Method for extracting DNA from food, feed and tobacco (CTAB  | SOP-No. 173               |
| 2001-07                      | method)  | 2022-04                   |
| ASU L 00.00-105<br>2014-02   | Testing of foodstuffs - Methods for the detection of genetically modified organisms and their products - Quantitative methods based on nucleic acids   |                           |
| ASU L 00.00-116              | GMO screening for the detection of DNA of the promoter from  | SOP-No. 479               |
| 2007-12                      | the cauliflower mosaic virus and the terminator from Agrobacterium tumefaciens by real-time PCR  | 2016-04                   |
| ASU L 00.00-122<br>2008-06   | Examination of food - Detection of a specific DNA sequence commonly used in genetically modified organisms (GMOs) from cauliflower mosaic virus (CaMV 35S promoter, P35S) and from Agrobacterium tumefaciens (T-nos) in food - Screening procedure | SOP-No. 162<br>2021-10    |
|                              | (Modification: Matrix here also feed and tobacco)  |                           |
| ASU L 00.00-125              | GMO screening for the detection of the CTP2-CP4-EPSPS sequence   | SOP-No. 213               |
| 2008-12                      | in food by real-time PCR   | 2019-10                   |
| ASU L 00.00-148              | Detection of a DNA sequence of the FMV promoter (pFMV) in  | SOP-No. 431               |
| 2014-02                      | food by real-time PCR (element-specific method)  | 2018-01                   |
| ASU L 00.00-169<br>2019-07   | Food Testing – Detection and Determination of Peanut in Food by Real-Time PCR  |                           |
| ASU L 08.00-58(V)<br>2011-06 | Detection of a specific DNA sequence from lupine in food using real-time PCR   | SOP-No. 192<br>2019-08    |
| ASU L 08.00-59<br>2013-01    | Detection and determination of mustard (Sinapis alba) and soy (glycine max.) in boiled sausages by real-time PCR   | SOP-No. 433<br>2019-08    |
| ASU L 10.00-12               | Investigation of food-fish species determination in raw fish and   | SOP-No. 432               |
| 2021-07                      | fish products by sequence analysis of cytochrome b sequences   | 2016-09                   |
| ASU L 15.05-1<br>2002-05     | Method for extracting DNA from food and feed (Wizard method)   | SOP-No. 174<br>2016-10    |
| ASU L 16.04.03-1<br>2012-07  | Preparation of DNA from native corn starch   | SOP-No. 428<br>2015-04    |
| ASU L 18.00-21               | Food Testing – Detection and determination of brazil nut   | SOP-No. 531               |
| 2014-08                      | (Bertholletia excelsa) in rice and wheat biscuits as well as in sauce powder using real-time PCR principles  | 2018-02                   |
| ASU L 23.04/03-1<br>2010-09  | Construct-specific real-time PCR method for the detection of genetic modification in flaxseed and flaxseed products  | SOP-No. 298<br>2012-07    |
| ASU L 44.00-8<br>2010-01     | Detection of a specific DNA sequence from hazelnut in food using real-time PCR   | SOP-No. 222<br>2018-09    |
|                              | I .  |                           |





| CRLVL01/04VR/VP            | Event-specific detection of genetically modified maize MON863 by   | SOP-No. 191            |
|----------------------------|--|------------------------|
| 2005-02                    | real-time PCR  | 2008-11                |
| CRLVL01/09VP<br>2011-09    | Event-specific detection of genetically modified soy CV127 in food using real-time PCR                                 | SOP-No. 477<br>2016-08 |
| CRLVL02/04VR/VP            | Event-specific detection of genetically modified maize TC1507 by   | SOP-No. 171            |
| 2015-02                    | real-time PCR  | 2008-11                |
| EURL-VL-02/11VP<br>2013-05 | Event-specific detection of genetically modified soy MON87708 by real-time PCR (according to EURL-VL-02/11VP)          | SOP-No. 475<br>2016-08 |
| CRLVL03/05VR/VP            | Event-specific detection of genetically modified maize DAS-59122-  | SOP-No. 167            |
| 2007-06                    | 7 by real-time PCR   | 2008-11                |
| CRLVL04/05VR/VP            | Event-specific detection of genetically modified maize MIR604 by   | SOP-No. 165            |
| 2007-04                    | real-time PCR  | 2021-10                |
| CRL VL05/06VP              | Detection of genetically modified soy MON89788 by real-time PCR  | SOP-No. 212            |
| 2008-02                    |  | 2019-05                |
| CRLVL07/07VP<br>2009-01    | Event-specific detection of genetically modified soy DP-305423-1 in food by real-time PCR                              | SOP-No. 478<br>2016-08 |
| CRLVL07/09VP<br>2012-01    | Event-specific detection of genetically modified soy MON87769 in food using real-time PCR                              | SOP-No. 476<br>2016-08 |
| EURL-VL-10/10VP            | Event-specific detection of genetically modified maize DAS-40278-  | SOP-No. 535            |
| 2012-11                    | 9 in food and feed by real-time PCR  | 2018-05                |
| CRL VL 16/05VP             | Event-specific detection of genetically modified maize MON88017  | SOP-No. 221            |
| 2005                       | using real-time PCR  | 2009-09                |
| CRLVL25/04VR               | Event-specific detection of genetically modified maize MON810 by   | SOP-No. 170            |
| 2009-06                    | real-time PCR  | 2021-10                |
| CRLVL29/04VR/VP            | Event-specific detection of genetically modified maize GA21 by   | SOP-No. 166            |
| 2005-01                    | real-time PCR  | 2021-10                |
| IWA 32                     | Screening of genetically modified organisms (GMOs) in cotton and   |                        |
| 2019-04                    | textiles   |                        |
| SOP-No. 193                | GMO screening for the detection of the construct P35: BAR in   |                        |
| 2017-04                    | genetically modified rice using real-time PCR  |                        |
| SOP-No. 216<br>2009-08     | GMO screening for the detection of the pat and bar gene sequence in genetically modified oilseed rape by real-time PCR |                        |
| SOP-No. 316                | Qualitative detection of animal species in food  |                        |
| 2019-06                    | Quantutive detection of animal species in root   |                        |
| SOP-No. 400                | Detection of a specific DNA sequence from cashews in food using  |                        |
| 2014-01                    | real-time PCR  |                        |
| SOP-No. 402                | Detection of a specific DNA sequence from almonds in food using  |                        |
| 2014-01                    | real-time PCR  |                        |
| SOP-No. 403                | Detection of a specific DNA sequence from sesame seeds in food   |                        |
| 2019-06<br>SOR-No. 406     | using real-time PCR Animal species quantification in food  |                        |
| SOP-No. 406<br>2014-03     | Animal species quantification in food  |                        |
| SOP-No. 429                | Real-time PCR method for the detection of genetic modification in  |                        |
| 2015-03                    | rice and rice products   |                        |
| SOP-No. 491                | Detection of a specific DNA sequence from pecan nut in food  |                        |
| 2016-08                    | using real-time PCR  |                        |





| SOP-No. 492 | Detection of a specific DNA sequence from macadamias in food      |  |
|-------------|---|--|
| 2016-08     | using real-time PCR   |  |
| SOP-No. 493 | Detection of a specific DNA sequence from pistachio in food using |  |
| 2016-08     | real-time PCR   |  |
| SOP-No. 530 | Detection of a specific DNA sequence from fish in food by real-   |  |
| 2018-02     | time PCR  |  |
| SOP-No. 618 | GMO screening for the detection of otp/mepsps in cotton by real-  |  |
| 2020-06     | time PCR  |  |

## 1.5.2 Determination of bacteria and viruses in food using real-time PCR\*\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology   | Short title of the laboratory's internal SOP |
|---|--|--|
| ASU L 00.00-98<br>2007-04                     | Testing of foodstuffs – Qualitative detection of salmonella in food – Real-time PCR method   | SOP-No. 426<br>2023-09                       |
| ASU L 00.00-147/2 (V)<br>2021-07              | Examination of foodstuffs - Horizontal method for the determination of hepatitis A virus and norovirus in food - Part 2: Methods for qualitative detection - Real-time RT-PCR (Restriction: here only detection of norovirus) (Modification: MS2 phage as process control) | SOP-No. 422<br>2010-08                       |
| ASU L 06.32-01<br>2013-08                     | Examination of foodstuffs – Detection of Campylobacter spp. in minced meat – real-time PCR method  | SOP-No. 421<br>2017-03                       |
| SOP-No. 396<br>2023-02                        | Food Testing – Qualitative Detection of listeria monocytogenes in food by real-time PCR  |  |
| SOP-No. 422<br>2010-08                        | Qualitative detection of noroviruses and hepatitis A on soft fruit and lettuce by real-time RT-PCR   |  |
| SOP-No. 423<br>2023-02                        | Detection of listeria spp. in food by real-time PCR  |  |
| SOP-No. 425<br>2017-02                        | Qualitative detection of cronobacter spp. in milk by real-time PCR   |  |
| SOP-No. 427<br>2022-10                        | Qualitative detection of alicyclobacillus spp. in juices and juice-related products using real-time PCR  |  |
| SOP-No. 444<br>2023-02                        | Detection of shiga toxin-producing enterohaemorrhagic escherichia coli (EHEC) in food by real-time PCR   |  |
| SOP-No. 490<br>2016-08                        | Qualitative detection of shigella spp. in milk and milk powder by real-time PCR  |  |



## 1.6 Sensory studies in food

## 1.6.1 simply descriptive sensory examinations of food\*

| Standard/in House Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology | Short title of the laboratory's internal SOP |
|--|--|--|
| ASU L 00.90-6                              | Testing of foodstuffs - Sensory test methods - Simple descriptive                  | SOP-No. 302                                  |
| 2015-06                                    | testing  | 2012-09                                      |
| ASU L 00.90-7                              | Examination of foodstuffs – Sensory test methods – Triangular                      |  |
| 2021-11                                    | test   |  |
| ASU L 00.90-8                              | Examination of foodstuffs - Sensory test methods - Comparative                     |  |
| 2019-12                                    | test in pairs  |  |
| ASU L 00.90-14                             | Examination of foodstuffs - Sensory test methods - Descriptive                     |  |
| 2019-03                                    | test followed by quality assessment  |  |

## 1.6.2 Special Sensory Testing of Olive Oil

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology   | Short title of the laboratory's internal SOP |
|---|--|--|
| VO (EG) Nr. 640/2008<br>2008-07               | Characteristics of olive oils and olive-pomace oils and the methods for their determination: Organoleptic testing of virgin olive oils |  |

#### 1.7 Sampling of food

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology | Short title of the laboratory's internal SOP |
|---|--|--|
| VO (EU) 2023/2782                             | Commission Regulation laying down methods of sampling and                          |  |
| 2023-12                                       | analysis for the official control of the mycotoxin content of                      |  |
|   | foodstuffs   |  |
|   | (Restriction: here only sampling)  |  |
| SOP-No. 307                                   | Sampling for microbiological analysis of food                                      |  |
| 2013-08                                       |  |  |
| Richtlinie 2002/63/EG                         | Establishing Community methods of sampling for the official                        |  |
| 2002-07                                       | control of pesticide residues in and on products of plant and                      |  |
|   | animal origin and repealing Directive 79/700/EEC                                   |  |
| VO (EG) Nr. 1882/2006                         | Determination of methods of sampling and analysis for the                          |  |
| 2006-12                                       | official control of the nitrate content of certain foodstuffs                      |  |
|   | (Restriction: here only sampling)  |  |
| VO (EG) Nr. 333/2007                          | Determination of sampling and analytical methods for the                           |  |
| 2007-03                                       | official control of the content of lead, cadmium, mercury,                         |  |
|   | inorganic tin, 3-MCPD and benzo(a)pyrene in foodstuffs                             |  |
|   | (Restriction: here only sampling)  |  |
| DIN CEN/TS 15568                              | Food - Methods for the detection of genetically modified                           |  |
| 2007-03                                       | organisms and their products - Sampling strategies                                 |  |
|   | (Restriction: here only sampling)  |  |



## 1.8 Sampling of feed

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology | Short title of the laboratory's internal SOP |
|---|--|--|
| VO (EG) 152/2009                              | Feed Sampling  |  |
| Anhang 1                                      |  |  |
| 2014-07                                       |  |  |
| VO (EG) 691/2013                              | Amendment to Regulation (EC) No 152/2009 as regards sampling                       |  |
| 2013-07                                       | and analytical methods   |  |
|   | (Modification: here also for matrix foods)   |  |
|   | (Restriction: here only sampling)  |  |

## 1.9 Sample Preparation of Food and Feed

| Standard/in House<br>Procedure/ Date of Issue |         |      | Analyte title of the standard or in-house method Information on testing technology | Short title of the laboratory's internal SOP   |                        |
|---|---------|------|--|--|------------------------|
| DGF<br>1998                                   | (       | C-VI | 11d  | Fatty acid methyl ester (alkaline transesterification)   | SOP-No. 512<br>2021-05 |
| ASU<br>2015-0                                 | L<br>06 | 0    | 0.00-19/1  | Determination of traces of elements in food - Pressure digestion (Modification: <i>Matrix here also feed</i> ) | SOP-No. 53<br>2023-07  |





- 2 Examination of consumer goods and textiles
- 2.1 Physical, physico-chemical and chemical investigations
- 2.1.1 Determination of residues and contaminants by liquid chromatography and mass-selective detection (LC-MS-MS) in consumer goods and textiles \*\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology | Short title of the laboratory's internal SOP |
|---|--|--|
| SOP-No. 214                                   | Determination of nicotine in textiles using LC-MS-MS                               |  |
| 2023-01                                       |  |  |
| SOP-No. 340                                   | Determination of quaternary ammonium compounds (QAV) in                            |  |
| 2013-08                                       | consumer goods and chemicals using LC-MS-MS  |  |
| SOP-No. 487                                   | Determination of per- and polyfluorinated alkys in consumer                        |  |
| 2023-03                                       | goods using LC-MS-MS   |  |
| SOP-No. 517                                   | Determination of acrylic acid in hygiene products using HPLC-                      |  |
| 2017-03                                       | DAD  |  |
| SOP-No. 543                                   | Determination of acrylamide in dry, heated foods, packaging,                       |  |
| 2022-11                                       | hygiene products and paper using LC-MSMS   |  |
| SOP-No. 625                                   | Determination of preservatives in cosmetics, hygiene articles,                     |  |
| 2022-06                                       | aqueous extracts and hot melts using LC-MS-MS                                      |  |
| SOP-No. 684                                   | Determination of formaldehyde in aqueous extracts, adhesives,                      |  |
| 2023-10                                       | plastics, SAP, textiles and fruit and vegetables using LC-MS/MS                    |  |
|   | Restrictions: here only adhesives, plastics, SAP, textiles                         |  |

#### 2.1.2 Determination of chromium (VI) in consumer goods and textiles using IC-ICP-MS \*\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology  | Short title of the laboratory's internal SOP |
|---|---|--|
| DIN EN 71-3<br>2021-06                        | Safety of toys - Part 3: Migration of certain elements (Restriction: here only analysis of chromium (VI)) (Modification: Matrix here also pigments) | SOP-No. 438<br>2021-08                       |
| SOP-No. 304<br>2021-08                        | Determination of extractable chromium (VI) in textiles by means of IC-ICP-MS after extraction with acidic synthetic welding solution                |  |

## 2.1.3 Determination of residues and contaminants in consumer goods by gas chromatography with standard detectors (GC-FID)

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology   | Short title of<br>the<br>laboratory's<br>internal SOP |
|---|--|---|
| SOP-No.418<br>2020-06                         | Determination of mineral oil (MOSH & MOAH) in food, feed and packaging materials by means of online coupled LC-GC-FID (Deviation: here only for packaging materials) |   |



## 2.1.4 Determination of residues and contaminants in consumer goods by gas chromatography with mass-selective detectors (GC-ICP-MS. GC-MSD) \*\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology                 | Short title of the laboratory's internal SOP |
|---|--|--|
| DIN EN 71-3                                   | Safety of toys – Part 3: Migration of certain elements (restriction: here                          | SOP-No. 20                                   |
| 2021-06                                       | only analysis of organotin compounds)  | 2023-11                                      |
| SOP-No. 31                                    | Determination of phthalates, adipates and tributyacetyl citrate in                                 |  |
| 2020-01<br>SOP-No. 55                         | consumer goods by GC-MSD  Determination of alkylphenols, ethoxylates and bisphenols in             |  |
| 2022-01                                       | consumer goods using GC-MSD  |  |
| SOP-No. 121                                   | Determination of epoxidized soybean Oil (ESBO) in food and consumer                                |  |
| 2006-04                                       | goods  |  |
| SOP-No. 128                                   | (Restriction: here only commodities)   |  |
| 2022-01                                       | Determination of aromatic amines in consumer goods using GC-MSD                                    |  |
| SOP-No. 159                                   | Determination of dimethylformamide and dimethylacetamide in  |  |
| 2018-12                                       | consumer goods by HS-GC-MSD  |  |
| SOP-No. 230                                   | Determination of the mass concentration of PCDD/PCDF and dioxin-                                   |  |
| 2021-07                                       | like PCBs in consumer goods and hygiene articles using GC-MSMS                                     | 1  |
| SOP-No. 293<br>2023-06                        | Determination of phenol and chlorophenols in consumer goods by GC-MSD                              |  |
| SOP-No. 341                                   |  |  |
| 2023-08                                       | Determination of EC and EPA PAHs in consumer goods using GC-MSD                                    |  |
|   | Plant-based foods – multi-method for the determination of pesticide                                |  |
| DIN EN 15662                                  | residues with GC and LC after acetonitrile extraction/distribution and                             | SOP-No. 342                                  |
| 2018-07                                       | purification with dispersive SPE – Modular QuEChERS method   | 2013-08                                      |
| 2018-07                                       | Extension: Consumables   |  |
|   | Restriction: Analysis here only with GC  |  |
| SOP-No. 520<br>2018-01                        | Determination of brominated flame retardants in waste and textiles using GC-MSD                    |  |
| SOP-No. 547                                   | Determination of PAHs in carbon black and carbon black-containing                                  |  |
| 2021-08                                       | matrices using toluene-Soxhlet extraction and GC-MSD   |  |
| SOP-No. 548<br>2021-10                        | Determination of EC and EPA PAHs in adhesives, hot melt, silicone and acrylic samples using GC-MSD |  |
| SOP-No. 550                                   | Determination of high levels (0.1%-1%) of alkylphenols, ethoxylates                                |  |
| 2019-01                                       | and bisphenols in consumer goods using GC-MSD  |  |
| SOP-No. 558<br>2019-02                        | Determination of rosin from consumer goods using GC-MSD  |  |
| SOP-No. 598<br>2023-04                        | Determination of antioxidants from vegetable oils, meat and feed by GC-MSD                         |  |
| SOP-No. 620<br>2021-11                        | Determination of allergenic fragrances in consumer goods using GC-MSD                              |  |
| SOP-No. 628<br>2023-04                        | Determination of aldehydes in consumer goods using GC-MSD  |  |
| SOP-No. 652<br>2021-11                        | Determination of ethylene glycol and propylene glycol in consumer goods by GC-MSD                  |  |



| ISO 787-28<br>2019-05 | General methods of tests for pigments and extenders – Part 28:  Determination of total content of polychlorinated biphenyls (PCB) by dissolution, cleanup and GC-MS                                   | SOP-No. 560<br>2023-05 |
|-----------------------|---|------------------------|
| DIN EN 15662          | Plant-based foods - Multi-method for the determination of pesticide residues with GC and LC after acetonitrile extraction/distribution and purification with dispersive SPE - Modular QuEChERS method | SOP-No.117             |
|                       | Extension to consumer goods   | 2020-06                |
|                       | Restriction: here only GC-MSD   |                        |

## 2.1.5 Determination of elements in consumer goods and textiles using inductively coupled plasma mass spectrometry (ICP-MS) \*\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology  | Short title of<br>the<br>laboratory's<br>internal SOP |
|---|---|---|
| ISO 7086-1<br>2000-03                         | Glass jars for foodstuffs - Release of lead and cadmium - Part 1: Test methods  (Modification: here also examination of plastic vessels)  | SOP-No. 208<br>2019-01                                |
| DIN EN ISO 17294-2<br>2024-01                 | Water quality - Application of inductively coupled plasma mass spectrometry (ICP-MS) - Part 2: Determination of selected elements including uranium isotopes                              | SOP-No. 79<br>2021-11                                 |
|   | (Modification: analytes here also Ta, Ti; Investigation also of digestion solutions of consumer goods including pressure digestion as well as heavy metals in textiles)                   |   |
| DIN EN 71-3<br>2021-06                        | Safety of toys — Part 3: Migration of certain elements (modification: matrix here also pigments))   | SOP-No. 318<br>2021-08                                |
| SOP-No. 272<br>2020-06                        | Determination of extractable metals in consumer goods with isotonic saline solution using ICP-MS  |   |
| Resolution AP (89)1<br>1989-09                | Resolution AP (89)1 on the use of colorants in plastic materials coming into contact with food (Modification: <i>Analysis here using ICP-MS</i> )   | SOP-No. 273<br>2020-06                                |
| DIN EN 16711-2<br>2016-02                     | Textiles - Determination of metal content - Part 2: Determination of extractable metals by acid synthetic welding solution by ICP-MS (Modification: analytes here also Mn, Se, Sn and Zn) | SOP-No. 516<br>2021-08                                |

#### 2.1.6 Photometric determination of contaminants in consumer goods and textiles\*

| Standard/Date of Issue inhouse Procedure | Analyte title of the standard or in-house method Information on testing technology  | Short title of the laboratory's internal SOP |
|--|---|--|
| ASU B 82.02-1<br>1985-06                 | examination of consumer goods; Determination of formaldehyde release from textile consumer goods (modification: <i>analysis here using UV/VIS</i> ) |  |
| SOP-No. 13 ECB<br>2014-06                | Determination of free and hydrolyzed formaldehyde in solid paper-<br>based material by spectrophotometry  |  |



## 2.1.7 Gravimetric examinations of consumer goods

| Standard/in House Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology   | Short title of<br>the laboratory's<br>internal SOP |
|--|--|--|
| ASU B 80.30-1(EG)<br>1998-01               | Examination of consumer goods - Basic rules for determining migration - Annex  |  |
| ASU B 80.30-4<br>2008-10                   | Examination of consumer goods – Plastics – Part 1: Guide to the selection of audit conditions and audit methods for the overall migration  |  |
| ASU B 80.30-6<br>2008-10                   | Examination of consumer goods – Plastics – Part 3: Test methods for total migration into aqueous test foods by total immersion   |  |
| ASU B 80.30-8<br>2023-02                   | Examination of consumer goods – Plastics – Part 5: Test Methods for total migration into aqueous Investigational foods by cell   |  |
| ASU B 80.30-10<br>2023-02                  | Examination of consumer goods – Plastics – Part 7: Test methods for total migration into aqueous test foods with one bag   |  |
| ASU B 80.30-12<br>2023-02                  | Examination of consumer goods – Plastics – Part 9: Test methods for total migration into aqueous test foods by filling the object  |  |
| ASU B 80.30-17<br>2023-02                  | Examination of consumer goods – plastics Part 14: Test methods for "substitute tests" for total migration from plastics intended for contact with fatty foods using the test media iso-octane and 95% ethanol  |  |
| ASU B 80.30-18<br>2023-18                  | Examination of consumer goods – Plastics – Part 15: Alternative test methods for determining migration into fatty test foods by rapid extraction in iso-octane and/or 95% ethanol  |  |
| ASU B 80.30-19<br>2008-10                  | Testing of consumer goods - Restricted substances in plastics - Part 1: Guidance on the test methods for the specific migration of substances from plastics into foodstuffs and investigational foods, the determination of substances in plastics and the selection of contact conditions with investigational foodstuffs |  |



## 2.1.8 Simple visual examinations to determine the color permeability of consumer goods\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology | Short title of the laboratory's internal SOP |
|---|--|--|
| ASU B 82.02-13                                | Determination of the colour permeability of articles of daily use Part             | SOP-No. 176                                  |
| 2011-12                                       | 2: Testing with welding simulant   | 2023-08                                      |
| ASU B 82.92-3                                 | Determination of the colour permeability of articles of daily use - Part           | SOP-No.176                                   |
| 2011-12                                       | 1: Testing with saliva simulant  | 2023-08                                      |
| SOP-No. 546                                   | Beilstein test   |  |
| 2018-12                                       |  |  |

#### 2.1.9 Determination of organic chemical residues in consumer goods

| Standard/in House Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology         | Short title of the laboratory's internal SOP |
|--|--|--|
| SOP-No. 315<br>2013-01                     | Determination of acrylic acid and residual monomers from superabsorbents using HPLC-UV-VIS |  |
| SOP-No. 517<br>2017-03                     | Determination of Acrylic Acid in Hygiene Products Using HPLC-DAD                           |  |

## $\textbf{2.2 Determination and detection of bacteria by means of cultural microbiological examinations on furnishings and commodities in the food industry * \\$

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology   | Short title of the laboratory's internal SOP |
|---|--|--|
| ASU B 80.00-1<br>2023-08                      | Investigation of consumer goods - determination of the surface germ content on furnishings and consumer goods in the food industry Part 1: Quantitative swab Method  | SOP-No. 262<br>2023-02                       |
| ASU B 80.00-2<br>2023-08                      | Investigation of consumer goods - determination of the surface germ content on furnishings and consumer goods in the food industry – Part 2: Semi-quantitative swab method   | SOP-No. 262<br>2023-02                       |
| ASU B 80.00-3<br>2023-08                      | Examination of consumer goods - determination of the surface germ content on furnishings and consumer goods in the food sector – Part 3: Semi-quantitative method with nutrient medium-coated dispensing devices, contact method | SOP-No. 262<br>2023-02                       |
| ASU B 80.56-5<br>2019-05                      | Paper and cardboard intended for contact with foodstuffs – Determination of the transfer of antimicrobial components (according to DIN EN 1104)  | SOP-No. 604<br>2020-04                       |
| Ph. Eur. 2.6.12<br>8. Ausgabe                 | Microbiological testing of non-sterile products: counting of microorganisms capable of reproduction  | SOP-No. 609<br>2012-06                       |
| Ph. Eur. 2.6.13<br>8. Ausgabe                 | Microbiological testing of non-sterile products: detection of specified microorganisms   | SOP-No. 610<br>2013-02                       |

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## 2.3 Special sensory testing of the smell and taste of paper, cardboard and consumer goods $^{\ast}$

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology   | Short title of the laboratory's internal SOP |
|---|--|--|
| DIN EN 1230-1<br>2010-02                      | Paper and cardboard intended for contact with foodstuffs – Sensory analysis Part 1: Odour  |  |
| DIN EN 1230-2<br>2018-10                      | Paper and paperboard intended for contact with foodstuffs- Sensory analysis Part 2: Taste transfer  Restriction: here only verification by means of triangular test)                     |  |
| ASU B80.00-4<br>2023-08                       | Inspection of consumer goods – Sensory testing – Testing of packaging materials and packaging materials for foodstuffs (Restriction: here only verification by means of triangular test) |  |



- 3 Investigation of water
- 3.1 Physical, physico-chemical, chemical investigations
- 3.1.1 Determination of organic and metal-organic compounds by gas chromatography and mass-selective detection (GC-MSD, GC-ICP-MS) \*\*

| Standard/in House Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology   | Short title of the laboratory's internal SOP |
|--|--|--|
| SOP-No. 5<br>2023-07                       | Determination of organolead compounds in water   |  |
| SOP-No. 85<br>2018-12                      | Determination of chlorobenzenes in water by GC-MSD   |  |
| SOP-No. 103<br>2020-07                     | Determination of EC and EPA PAHs in water by GC-MSD  |  |
| SOP-No. 154<br>2020-05                     | Determination of phthalic acid esters and adipates in water using GC-MSD   |  |
| SOP-No. 156<br>2019-02                     | Determination of alkylphenols, alkylphenol ethoxylates and bisphenols in water by GC-MSD   |  |
| SOP-No. 667<br>2022-08                     | Determination of 1,3-dichloropropane-2-ol and 3-monochloropropane-1,2-diol from cold water extracts by GC-MSD                                |  |
| DIN EN 12673<br>1999-05                    | Water quality – gas chromatographic determination of some selected chlorophenols in water  | SOP-No. 155<br>2008-05                       |
| DIN EN ISO 17353 (F 13)<br>2005-11         | Water quality – Determination of selected organotin compounds – Gas chromatography method (Modification: <i>Analysis here using ICP-MS</i> ) | SOP-No. 2<br>2023-03                         |

#### 3.1.2 Determination of elements using ICP-MS

| Standard/in House Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology            | Short title of the laboratory's internal SOP |
|--|---|--|
| DIN EN ISO 17294-2                         | Water quality - Application of inductively coupled plasma mass                                |  |
| 2024-03                                    | spectrometry (ICP-MS) - Part 2: Determination of selected elements including uranium isotopes | 2023-07                                      |
|  | (Modification: analytes here also Ta)   |  |

#### 3.1.3 Further chromatographic investigations

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology  | Short title of the laboratory's internal SOP |
|---|---|--|
| DIN EN ISO 10304-1<br>2009-07                 | Water quality - Determination of dissolved anions by liquid ion chromatography - Part 1: Determination of bromide, chloride, fluoride, nitrate, nitrite, phosphate and sulphate | SOP-No. 37<br>2023-11                        |
| SOP-No. 234<br>2009-11                        | Determination of glyphosate, AMPA and glufosinate in water by LC-MS-MS  |  |

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| SOP-No. 551 | Determination of elemental sulfur from liquid matrices by GC-ICP-MS |  |
|-------------|---|--|
| 2019-02     |   |  |

#### 3.1.4 Physikalisch-chemische Kenngrößen

| Standard/in House        | Analyt- Titel de Analyte title of the standard or in-house method | Short title of   |
|--------------------------|---|------------------|
| Procedure/ Date of Issue | Information on testing technology r Norm oder des Hausverfahrens  | the laboratory's |
|                          | Angaben zur Prüftechnik   | internal SOP     |
| DIN 38404-C4             | Determination of temperature                                      |                  |
| 1976-12                  |   |                  |

#### Investigation of sediments, soils and sludges

- 4.1 Physical, physico-chemical and chemical investigations
- 4.1.1 Determination of organic and metal-organic compounds by gas chromatography and massselective detection (GC-MSD and GC-ICP-MS) \*\*

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology  | Short title of the laboratory's internal SOP |
|---|---|--|
| SOP-No. 1<br>2018-01                          | Determination of organotin compounds in sediments using GC-ICP-MS   |  |
| 2018-01                                       |   |  |
| SOP-No.4                                      | Determination of organolead compounds in sediment   |  |
| 2023-07                                       |   |  |
| SOP-No. 231                                   | Determination of mass concentration of PCDD/PCDF and dioxin-like  |  |
| 2021-11                                       | PCBs in environmental samples   |  |
| SOP-No. 342                                   | Determination of pesticides in consumer goods and environmental   |  |
| 2013-08                                       | samples using GC-MSD (QuEChERS)   |  |
|   | (Restriction: here only examination of sediments and soils)   |  |
| SOP-No. 553                                   | Determination of alkylphenols and alkylphenol ethoxylates and   |  |
| 2019-12                                       | bisphenols from soil and sediments by GC-MSD  |  |
| DIN EN 15662                                  | Plant-based foods – Multi-method for the determination of pesticide   | SOP-No. 117                                  |
| 2018-07                                       | residues with GC and LC after acetonitrile extraction/distribution and purification with dispersive SPE – Modular QuEChERS method | 2020-06                                      |
|   | Extension: to sediments, soils  |  |
|   | Restriction: Analysis here only with GC-MSD   |  |
| DIN EN ISO 18287                              | DIN EN ISO 18287 Soil Condition Determination of Polycyclic Aromatic Hydrocarbons   |  |
| 2006-05                                       | (PAHs) Gas Chromatographic Method with Detection by Mass Spectrometry (GC-MS9 (ISO 18287:2006)                                    | 2019-10                                      |
| DIN EN ISO 23161                              | 23161 Soil conditions – Determination of selected organotin compounds –   |  |
| 2019-04                                       | Gas chromatographic method  | 2023-11                                      |

#### 4.1.2 Gravimetric determinations

| Standard/in House<br>Procedure/ Date of Issue | Analyte title of the standard or in-house method Information on testing technology | Short title of the laboratory's internal SOP |
|---|--|--|
| DIN EN 15934                                  | Sludge, treated bio-waste, soil and waste - Calculation of dry matter SOP-No. 26   |  |
| 2012-11                                       | fraction after determination of dry residue or water content. 2020-06              |  |

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(Restriction: here only application of method A)



## ${\bf 5} \ \textbf{Investigations in accordance with the Drinking Water Ordinance - TrinkwV} \\$

#### Sampling

| Procedure               | Title  |
|-------------------------|--|
| DIN EN ISO 19458 (K 19) | Water Quality - Sampling for microbiological |
| 2006-12                 | testing                                      |

#### **APPENDIX 1: MICROBIOLOGICAL PARAMETERS**

#### PART I: General requirements for drinking water

| Seq. No. | Parameter                  | Procedure                        |
|----------|----------------------------|----------------------------------|
| 1        | Escherichia coli (E. coli) | DIN EN ISO 9308-1 (K 12) 2017-09 |
| 2        | Intestinale Enterokokken   | DIN EN ISO 7899-2 (K 15) 2000-11 |

#### PART II: Requirements for drinking water intended for sale in sealed containers

| Seq- No. | Parameter                  | Procedure                        |
|----------|----------------------------|----------------------------------|
| 1        | Escherichia coli (E. coli) | DIN EN ISO 9308-1 (K 12) 2017-09 |
| 2        | Intestinale Enterokokken   | DIN EN ISO 7899-2 (K 15) 2000-11 |
| 3        | Pseudomonas aeruginosa     | DIN EN ISO 16266 (K 11) 2008-05  |

#### **APPENDIX 2: CHEMICAL PARAMETERS**

PART I: Chemical parameters, the concentration of which does not normally increase in the distribution network, including the drinking water installation

not occupied

PART II: Chemical parameters, the concentration of which may increase in the distribution network, including the drinking water installation

not occupied

**APPENDIX 3: INDICATOR PARAMETERS** 

**PART I: General indicator parameters** 

| Seq. No. | Parameter                                  | Procedure                        |
|----------|--|----------------------------------|
| 1        | Aluminium                                  | not occupied                     |
| 2        | Ammonium                                   | not occupied                     |
| 3        | Chlorid                                    | not occupied                     |
| 4        | Clostridium perfringens (including spores) | DIN EN ISO 14189 (K 24) 2016-11  |
| 5        | Coliform bacteria                          | DIN EN ISO 9308-1 (K 12) 2017-09 |
| 6        | Iron                                       | not occupied                     |
| 7        | Spectral absorption coefficient Hg 436 nm) | not occupied                     |
| 8        | Odor (als TON)                             | not occupied                     |
| 9        | Taste                                      | not occupied                     |
| 10       | Colony count at 22 °C                      | DIN EN ISO 6222 (K 5) 1999-07    |





| Seq. No. | Parameter                            | Procedure                     |
|----------|--------------------------------------|-------------------------------|
|          |                                      | TrinkwV §15 Absatz (1c)       |
| 11       | Colony count at 36 °C                | DIN EN ISO 6222 (K 5) 1999-07 |
| 11       |                                      | TrinkwV §15 Absatz (1c)       |
| 12       | Conductivity                         | not occupied                  |
| 13       | Mangan                               | not occupied                  |
| 14       | Sodium                               | not occupied                  |
| 15       | Organically sequestered carbon (TOC) | not occupied                  |
| 16       | Oxidizability                        | not occupied                  |
| 17       | Sulfat                               | not occupied                  |
| 18       | Trübung                              | not occupied                  |
| 19       | Hydrogen Ion Concentration           | not occupied                  |
| 20       | Calcite Dissolving Capacity          | not occupied                  |

#### Part II: Special requirements for drinking water in drinking water installations

| Parameter        | Procedure  |
|------------------|--|
| Legionella spec. | DIN EN ISO 11731 2019-03  UBA Recommendation 18 December 2018 (issued 12.2022) |

# **APPENDIX 3a: Requirements for drinking water regarding radioactive substances** not occupied

Parameters not included in Appendices 1 to 3 of the Drinking Water Ordinance Further periodic examinations

not occupied