



SAMPLE SUBMISSION FORM: FOOD & FEED CHEMISTRY TESTING

| | | |
|--|---|---|
| Enquiries: Section Head Food & Feed Chemistry | | Laboratory Reference No: |
| Customer Contact Information: | | |
| Customer /Company Name | | |
| Primary contact person | | |
| Samples submitted by | | |
| Postal Address & Town | | |
| Tel / Mobile Number | | |
| Email Address | | |
| Accounts contact person | | |
| Tel / Mobile Number | | |
| Email Address | | |
| Financial Information: | | FOR OFFICIAL USE |
| Charge to | | Sample(s) received & inspected by |
| Customer / Company (listed above) <input type="checkbox"/> | | Name: _____ |
| Other <input type="checkbox"/> _____ | | Signature: _____ |
| Purchase Order No: _____ | | Date: _____ Time: _____ |
| Quotation No (if any): _____ | | Sample(s) accepted (tick) <input type="checkbox"/> |
| Customer Account type (tick the appropriate box) | | Sample(s) accepted with exception (tick) <input type="checkbox"/> |
| Credit Account | <input type="checkbox"/> Note: Payment to be done within 30 days | Sample(s) rejected (tick) <input type="checkbox"/> |
| Cash Customer | <input type="checkbox"/> Note: Payment to be done prior to testing | If rejected, was the customer informed (tick) <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Analytical Instructions | | Reason for rejection: |
| Rush TAT requests must be approved by the laboratory. A surcharge will apply. | | Additional information/known hazards (if any) |
| Standard Turn-Around-Time <input type="checkbox"/> (10 working days) | | |
| Rush Turn-Around-Time <input type="checkbox"/> (5 working days) | | |
| Test Report | | |
| <ul style="list-style-type: none"> • Test Report(s) will be emailed to primary contact by default • Additional Test Report(s) will be emailed as specified below: | | |
| Email primary contact (tick) <input type="checkbox"/> | | |
| Other email address (tick & specify below) <input type="checkbox"/> | | |
| _____ | | |
| Samples accepted with exception: | | |
| I the customer agree that the sample(s) should be tested even though not in compliance with the acceptance criteria. | | |
| Customer Signature: _____ | | |
| Date: _____ | | |
| Customer Authorisation (compulsory) | | |
| By signing below, you agree to Analytical Laboratory Services Terms & Conditions and authorise Analytical Laboratory Services to perform the requested tests to the best of their knowledge and in accordance with specified Test Methods. | | |
| Customer Signature: _____ | | |
| Date: _____ | | |

| Sample Information | | | | | FOR OFFICIAL USE |
|--------------------|--------------------|---------------|---------------|----------------|------------------|
| No. | Sample Description | Sampling Date | Sampling Time | Sample Matrix* | Lab Sample No. |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| 9. | | | | | |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | |
| 13. | | | | | |
| 14. | | | | | |
| 15. | | | | | |
| 16. | | | | | |
| 17. | | | | | |
| 18. | | | | | |
| 19. | | | | | |
| 20. | | | | | |
| 21. | | | | | |

***Sample Matrix Abbreviation Key**

Food = F Mixed Feed = MF Feed Component = FC Beverage = B Meal = M Oil = O Tallow = T By-products = BP
 Plant material = P

Please specify Sample/product type

Sampling done by: _____

Signature: _____

Reference of the sampling method (if available): _____

Sampling Location/Factory name: _____

Special Instructions (when applicable): sample storage/disposal, outsourced work

Note: Complete page 1-2 and all other applicable pages to your request

| CHEMICAL TESTING OF FOOD | | | | |
|--|--|------------------|---|--------------------------|
| Note: The laboratory will select the test parameters on behalf of the client, when a signed quotation is attached to this request form. | | | | |
| No. | Test Parameters | Min. Sample Size | Reference Method | Tick |
| 1. | Moisture on Food (104.5°C/4h or 130°C/2h) | 60g | WHK METH FC 022 based AOAC Official Method 925.10 | <input type="checkbox"/> |
| 2. | Moisture on meat (104.5°C/4h) | 60g | WHK METH FC 025 adapted from Official & Standardized Methods of Analysis, Meat Products and Meat Extracts, pg. 328-329 | <input type="checkbox"/> |
| 3. | Crude fats and oils, total, on food | 60g | WHK METH FC 026 – Soxhlet method based on AOAC Official Method 922.06 | <input type="checkbox"/> |
| 4. | Crude fibre (Solid Plant based food) | 60g | WHK METH FC 005 based on AOCs Ba 6a-05 | <input type="checkbox"/> |
| 5. | Crude nitrogen (Protein calculated) on food | 60g | WHK METH FC 004 Kjeldahl method adapted from Buchi Kjeldahl guide and AgriLASA Method Nr 2.2 | <input type="checkbox"/> |
| 6. | Ash (inorganic fraction) on food | 60g | WHK METH FC 003 based on AgriLASA Method Nr 2.5.1 and ISO 5984-1978 | <input type="checkbox"/> |
| 7. | Total carbohydrates (require protein, fat, moisture, ash) on food | - | Calculated - WHK METH FC 001 , 002/026, 003, 004 | <input type="checkbox"/> |
| 8. | Available carbohydrates (require protein, fat, moisture, ash, crude fibre) on food | - | Calculated - WHK METH FC 001 , 002/026, 003, 004, 005 | <input type="checkbox"/> |
| 9. | Metabolizable Energy on food (require: fat, carbohydrates, protein) | - | Calculated - WHK METH FC 001 , 002/026, 003, 004, 005 | <input type="checkbox"/> |
| 10. | pH (Alcohol free beverages and flour) | 60g | WHK METH FC 036 Electrometric method based on AOAC Official Method 981.12 | <input type="checkbox"/> |
| 11. | Granulation/Particle size on flour (indicate sieve size) | 300g | WHK METH FC 042 based on AOAC Official Method 965.22 | <input type="checkbox"/> |
| 12. | Density in milk, juices and other liquid foods (pycnometry) | 200ml | WHK METH FC 023 based on AOAC Official Method 945.06 | <input type="checkbox"/> |
| 13. | Salt (chloride as sodium chloride) on food | 60g | WHK METH FC 027 In-house method based on APHA, 19 th ed. | <input type="checkbox"/> |
| 14. | Total volatile basic nitrogen (TVBN) on fish | 250g | WHK METH FC 030 based on Official Journal of EC No L 97/84 (95/149/EC) | <input type="checkbox"/> |
| 15. | Reducing and total sugar in beverages | 100ml | WHK METH FC 033 based on Gafta, Luff-Schoorl Method, Method 10.1 | <input type="checkbox"/> |
| 16. | Fat on milk and milk products | 100ml | WHK METH FC 031 Gravimetric method based on Standard Methods for the Examination of Dairy Products, 16 th Ed. Pg 474-479 | <input type="checkbox"/> |

| CHEMICAL TESTING OF FEED | | | | |
|--|---|------------------|---|--------------------------|
| Note: The laboratory will select the test parameters on behalf of the client, when a signed quotation is attached to this request form. | | | | |
| No. | Test Parameters | Min. Sample Size | Reference Method | Tick |
| 1. | Moisture on Feed (104.5°C/4h or 130°C/2h) | 60g | WHK METH FC 001 based on ISO 6496:1999 | <input type="checkbox"/> |
| 2. | Crude fats and oils, extractable, on feed | 60g | WHK METH FC 002 based on AgriLASA Method Nr 2.3 | <input type="checkbox"/> |
| 3. | Crude fats and oils, total, on feed | 60g | WHK METH FC 026 – Soxhlet method based on AOAC Official Method 922.06 | <input type="checkbox"/> |
| 4. | Crude nitrogen (Protein calculated) on feed | 60g | WHK METH FC 004 adapted from Buchi Kjeldahl guide and AgriLASA Method Nr 2.2 | <input type="checkbox"/> |
| 5. | Ash (inorganic fraction) on feed | 60g | WHK METH FC 003 based on AgriLASA Method Nr 2.5.1 and ISO 5984-1978 | <input type="checkbox"/> |
| 6. | Crude fibre on feed | 60g | WHK METH FC 005 based on AOCs Ba 6a-05 | <input type="checkbox"/> |
| 7. | Acid detergent fibre on feed <i>Specify if the sample contains roasted soybean</i> | 60g | WHK METH FC 006 based on AOAC 973.18 | <input type="checkbox"/> |
| 8. | Neutral detergent fibre on feed <i>Specify if the sample contains roasted soybean</i> | 60g | WHK METH FC 007 based on AOAC 2002.4. | <input type="checkbox"/> |
| 9. | Acid Detergent Lignin on feed <i>Specify if the sample contains roasted soybean</i> | 60g | WHK METH FC 008 based on AgriLASA Method Nr. 3.2.3 | <input type="checkbox"/> |
| 10. | Total digestible nutrients (only single feed components) (require moisture, protein, fat, ash, crude fibre) on feed | - | Calculated – WHK METH FC 001 , 002/026, 003, 004, 005 | <input type="checkbox"/> |
| 11. | Digestible energy (only single feed components) (require total digestible nutrients) | - | Calculated - WHK METH FC 001 , 002/026, 003, 004, 005 | <input type="checkbox"/> |
| 12. | Metabolisable energy (only single feed components) (requires: Digestible energy) | - | Calculated - WHK METH FC 001 , 002/026, 003, 004, 005 | <input type="checkbox"/> |
| 13. | Peroxide value on feed (require cold solvent extraction) | 300g | WHK METH FC 015 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg. 73 and Deutsche Einheitsmethoden C-III 4 (53) | <input type="checkbox"/> |
| 14. | Free fatty acids on feed (require cold solvent extraction) | 300g | WHK METH FC 016 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg. 199-200 and Deutsche Einheitsmethoden C-VI 6a (84) - Wheeler | <input type="checkbox"/> |
| 15. | Urea on feed | 60g | WHK METH FC 010 based on AgriLASA Method Nr 4.6 | <input type="checkbox"/> |
| 16. | Total Water-Soluble Tannins and Phenolics on plant material | 60g | WHK METH FC 009 In-house method based on Quantification of Tannins in Tree Foliage, FAO/IAEA Working Document IAEA, VIENNA, 2000 | <input type="checkbox"/> |
| 17. | Salt (chloride) on feed | 60g | WHK METH FC 012 based on SANS 202:2006 | <input type="checkbox"/> |

Note: Complete page 1-2 and all other applicable pages to your request

| CHEMICAL TESTING OF TALLOW AND OIL | | | | |
|--|---------------------------------|------------------|---|--------------------------|
| Note: The laboratory will select the test parameters on behalf of the client, when a signed quotation is attached to this request form. | | | | |
| No. | Test Parameters | Min. Sample Size | Reference Method | Tick |
| 1. | Acid value / % free fatty acids | 40g / 40ml | WHK METH FC 015 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg. 73 and Deutsche Einheitsmethoden C-III 4 (53) | <input type="checkbox"/> |
| 2. | Peroxide value | 40g / 40ml | WHK METH FC 016 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg. 199-200 and Deutsche Einheitsmethoden C-VI 6a (84) - Wheeler | <input type="checkbox"/> |
| 3. | Saponification value | 40g / 40ml | WHK METH FC 018 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg.77 - 78 and DGF-Einheitsmethoden C-V 3 | <input type="checkbox"/> |
| 4. | Iodine value | 40g / 40ml | WHK METH FC 017 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg. 91 and DGF-Einheitsmethoden (C-V 11a (53)) | <input type="checkbox"/> |
| 5. | Unsaponifiable matter | 50g / 40ml | WHK METH FC 020 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg. 157-159 and Deutsche Einheitsmethoden C-III 1b (77) | <input type="checkbox"/> |
| 6. | Insoluble impurities | 80g / 80 ml | WHK METH FC 019 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg. 230 and Deutsche Einheitsmethoden C-III 11a (84) | <input type="checkbox"/> |
| 7. | Moisture & volatile matter | 40g / 40 ml | WHK METH FC 014 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg. 223 | <input type="checkbox"/> |
| 8. | Ash | 40g / 40ml | WHK METH FC 013 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg. 232-233 and Deutsche Einheitsmethoden C-III 10 (53) | <input type="checkbox"/> |
| 9. | Density of oil | 200ml | WHK METH FC 021 adapted from Standard methods for the Analysis of Oils, Fats and Derivatives, 7 th edition, pg. 31-33 and Deutsche Einheitsmethoden C-IV 2 (52) | <input type="checkbox"/> |
| 10. | Urease activity in Soya | 40g / 40ml | WHK METH FC 011 In-house method based on AgiLASA Method Nr 10.2 | <input type="checkbox"/> |

| CHEMICAL TESTING OF ALCOHOLIC BEVERAGES | | | | |
|--|--|------------------|--|--------------------------|
| <i>Minimum 250ml sample size is required</i> | | | | |
| No. | Test Parameters | Min. Sample Size | Reference Method | Tick |
| 1. | Residual Sugar in wine | | WHK METH FC 034 adapted from Methods of analysis for Wine Laboratories, Method 4.1 | <input type="checkbox"/> |
| 2. | Total Titratable acidity in alcohol | | WHK METH FC 035 adapted from Methods of analysis for Wine Laboratories, Method 1.1 | <input type="checkbox"/> |
| 3. | Alcohol content in beverages (pycnometry) | | WHK METH FC 036 adapted from Methods of analysis for Wine Laboratories, Method 3.2 | <input type="checkbox"/> |
| 4. | Alcohol content in sanitizers (pycnometry) | | WHK METH FC 041 In-house method adapted from US Pharmacopia and National Formulary, USP 37 NF 32 2014, 611 | <input type="checkbox"/> |
| 5. | Sulphur dioxide, free in beverages/wine | | WHK METH FC 045 adapted from Methods of analysis for Wine Laboratories, Method 2.1.1 | <input type="checkbox"/> |
| 6. | Sulphur dioxide, total in beverages/wine | | WHK METH FC 045 adapted from Methods of analysis for Wine Laboratories, Method 2.1.1 | <input type="checkbox"/> |

| ELEMENTAL ANALYSIS ON FOOD/FEED/OIL/BEVERAGES BY ICP-OES (Optima/Avio) or ICP-MS | | | | |
|--|-----------------------|------------------|---|--------------------------|
| <i>Minimum 60g / 60ml sample size is required</i> | | | | |
| No. | Test Parameters | Min. Sample Size | Reference Method | Tick |
| NOTE: All elemental analysis requires a sample digestion method, the Laboratory will advise on a suitable method. | | | | |
| 1. | Aluminium (Al) | | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 2. | Antimony (Sb) | | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 3. | Arsenic (As) | | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 4. | Barium (Ba) | | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 5. | Boron (B) | | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 6. | Cadmium (Cd) | | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 7. | Calcium (Ca) | | WHK METH ICP 001/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 8. | Chromium (total) (Cr) | | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 9. | Cobalt (Co) | | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 10. | Copper (Cu) | | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 11. | Iron (Fe) | | WHK METH ICP 001/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 12. | Lead (Pb) | | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 13. | Magnesium (Mg) | | WHK METH ICP 001/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |

Note: Complete page 1-2 and all other applicable pages to your request

| ELEMENTAL ANALYSIS ON FOOD/FEED/OIL/BEVERAGES BY ICP-OES (Optima/Avio) or ICP-MS <i>Minimum 60g / 60ml sample size is required</i> | | | |
|--|-----------------|---|--------------------------|
| No. | Test Parameters | Reference Method | Tick |
| 14. | Manganese (Mn) | WHK METH ICP 001/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 15. | Mercury (Hg) | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 16. | Molybdenum (Mo) | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 17. | Nickel (Ni) | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 18. | Potassium (K) | WHK METH ICP 001/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 19. | Phosphorus (P) | WHK METH ICP 001//003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 20. | Selenium (Se) | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 21. | Sodium (Na) | WHK METH ICP 001/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 22. | Tin (Sn) | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 23. | Zinc (Zn) | WHK METH ICP 001/002/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |
| 24. | Sulfur (S) | WHK METH ICP 001/003 based on AWWA 3120 B: 24 th Edition, 2023 | <input type="checkbox"/> |

| GROUP TESTS <i>Minimum 200g sample size is required</i> | | | |
|--|---|--|--------------------------|
| Note: The laboratory will select the test parameters on behalf of the client, when a signed quotation is attached to this request form. | | | |
| No. | Test Parameters | | Tick |
| 1. | Nutritional analysis of feed (single feed component) Sample preparation, moisture, crude nitrogen (protein calculated), crude fats & oils (extractable), crude fibre, acid detergent fibre, dry ashing, Microwave Digestion, Ca, P, total digestible nutrients (calculated), digestible energy (calculated) and metabolizable energy (calculated) | | <input type="checkbox"/> |
| 2. | Nutritional analysis of feed (mixed feed) Sample preparation, moisture, crude nitrogen (protein calculated), crude fats & oils (extractable), crude fibre, acid detergent fibre, dry ashing, Microwave Digestion, Ca, P | | <input type="checkbox"/> |
| 3. | Nutritional analysis of food Sample preparation, moisture, crude nitrogen (protein calculated), crude fats & oils (total), crude fibre, dry ashing and dissolution of ash, Na, total and available carbohydrates (calculated) and metabolizable energy (calculated) | | <input type="checkbox"/> |
| 4. | Plant tissue analysis Sample preparation, crude nitrogen, wet digestion high temperature, P, Na, K, Mg, Ca, Mn, Fe, Cu, Zn, S | | <input type="checkbox"/> |

| Outsourced Testing | | | |
|---------------------------|---|--|--------------------------|
| No. | Test Parameters | | Tick |
| 1. | Multi-mycotoxins on Grains and Flour - Aflatoxins: B1, B2, G1, G2, Fumonisin: (B1, B2, B3), Deoxynivalenol & 15-ADON, HT-2, Ochratoxin A, T-2 Toxin, Zearalenone <i>Minimum 1kg of sample is required</i> | | <input type="checkbox"/> |
| 2. | Multi Residue Levels (Pesticide Residues) – Compounds list on request <i>Minimum 1kg of sample is required</i> | | <input type="checkbox"/> |
| 3. | Aflatoxins B/G (Groundnuts, spices, tree nuts, dried fruit, cereals, feeds) <i>Minimum 350g of sample is required</i> | | <input type="checkbox"/> |
| 4. | Vitamins ((Indicate vitamin types to be tested)) and Full Scope: Typical Nutritional Analysis <i>Minimum 500g of sample is required</i> | | <input type="checkbox"/> |

Note: Prices are provided via a quotation