# Prairie Tide Analytical Service Listing – Nutraceuticals & Natural Products

Prairie Tide Analytics offers testing as pertains to the chemical, nutritional and contaminant content of seed, oil, and other raw materials used in the food, beverage, and natural health product industries.

Table 1. Individual Analytical Tests

| Test | Method | |
|---|---|---|
| **Allergens** | | |
| Gluten | AOAC 2014.03 | Please contact PTA for pricing. |
| Egg | ELISA | |
| Milk | ELISA | |
| Mustard | ELISA | |
| Peanut | ELISA | |
| Sesame | ELISA | |
| Soy | ELISA | |
| **Antinutrients** | | |
| Cyanogenic glucosides/Glucosinolates | *In house* | |
| Isothiocyanates | *In house* | |
| Myrosinase Activity | *In house* | |
| Phytic acid | *In house* | |
| Total Phenolic Content | AOAC 2017.13 | |
| **Antioxidants** | | |
| Astaxanthin | FCC | |
| Ethoxyquin | AOCS Ce 6-86 | |
| Sterols (profile) | *In house, HPLC* | |
| Tocopherol Acetate | *In house* | |
| Tocopherols (profile) | *In house, HPLC* | |
| **Colour** | | |
| Lovibond | AOCS Cc 13b-45 | |
| Gardner | AOCS Td 1a-64 | |
| **Composition** | | |
| Oil Content | *In house, NMR* | |
| Oil Content in Seed, Meal and Cake | *In house, NMR* | |
| Total Oil | AOAC 983.23 | |
| Fatty Acid Composition (mg/g) | AOCS Ce 1i-07, Ce 1j-07 | |
| Fatty Acid Profile (%) | AOCS Ce 1i-07, Ce 1j-07 | |
| With Calculated Iodine Value (g $I_2$/100g) | AOCS Cd 1c-85 | |
| Cholesterol | AOCS Ce 12-16 | |
| Ethanol Content (%) | USP | |

| | |
|---|---|
| **Density/Specific Gravity** | |
| Density/Specific Gravity | *In house* |
| Bulk Density | USP <616> |
| Tap Density | USP <616> |
| **Elemental Analysis (ICP)** | |
| Single element | AOCS Ca 17-01, Ca 20-99 |
| Additional elements (per element) | |
| **Microbiology** | |
| Total Aerobic Count | *BioLumex (USP; MPN)* |
| Total Yeast and Mould | *BioLumex (USP; MPN)* |
| Pathogen – *Staphylococcus aureus* | *BioLumex* |
| Pathogen – *Escherichia coli* | *BioLumex* |
| Pathogen – *Pseudomonas aeruginosa* | *BioLumex* |
| Pathogen – *Salmonella* | *BioLumex* |
| Pathogen – *Fecal Coliforms/E. coli* | *BioLumex* |
| **Moisture** | |
| Moisture (Karl Fisher) | *In house* |
| Moisture | AOCS Ca 2b-38 |
| Moisture (Loss on Drying) | AOCS Ba 2a-38 |
| Moisture Content in Oil | *In house, NMR* |
| Moisture Content in Seed, Meal and Cake | *In house, NMR* |
| **Nutritional Labelling** | |
| Calorific Calculation | *In house* |
| Carbohydrate | *In house, UV-Vis* |
| Crude Fibre | *In house* |
| Moisture | AOCS Ba 2a-38 |
| Total Oil | AOAC 983.23 |
| Total Sugar | *In house, UV-Vis* |
| Total Protein | *In house, LECO* |
| Total Protein | *In house, NIR* |
| Guaranteed Analysis (Fibre/Moisture/Oil/Protein) | |
| **Other** | |
| Ascorbic Palmitate/Vitamin A/Vitamin D | *In house* |
| Carbohydrate (Total and Individual) | *In house, NMR* |
| Orbitide (cyclic peptides) | *In house* |
| Residual Solvents (Class 1/2) | USP <467> |
| SDG (Secoisolariciresinol Diglucoside) | *In house* |
| Sugar Content (Brix%) | *In house* |
| Viscosity | *In house* |
| **Quality** | |
| Acid Value/Free Fatty Acid | AOCS Ca 5a-40 |
| Cold Test | AOCS Cc 11-53, USP |
| Glycerol Free | *In house, NMR* |
| Glycerol Total | *In house, NMR* |
| Hexane Residues | AOCS Ca 3b-87 |

| | | |
|---|---|---|
| Infrared Absorption (NIR) | *In house, NIR* | |
| Insoluble Impurities | AOCS Ca 3a-46 | |
| Iodine Value (g $I_2$/100g) | AOCS Cd 1d-92 | |
| Melamine | *In house, NMR* | |
| Mono& Di Glyercides | AOCS Cd 11b-91 | |
| OSI (Rancimat) | AOCS Cd 12-57 | |
| p-Anisidine Value | AOCS Cd 18-90 | |
| Peroxide Value | AOCS C d 8b-90 | |
| pH | *In house* | |
| Phospholipids (Absolute/individual values) | *In house* | |
| Refractive Index | *In house* | |
| Saponification Value | AOCS Cd 3-25 | |
| Screening for Encapsulation | *In house* | |
| Specific Gravity | *In house,* AOCS To 1b-64 | |
| TOTOX Calculation | USP <401> | |
| Unsaponifiable Matter | AOCS Ca 6a-40, Ca 6b-53 | |
| Water Activity | *In house* | |
| Toxins | | |
| Aflatoxin | ELISA | |
| Deoxynivalenol (Vomitoxin) | ELISA | Please contact PTA for pricing. |
| Fumonisin | ELISA | |
| Ochratoxin A | ELISA | |
| T-2 Toxin | ELISA | |
| Other tests available upon request. | | |

All standard rates include reporting results within a standard turnaround time. For routine samples, the average turnaround time is 2-3 business days.

For pricing, please request a quote.

If you have any questions, please contact: Martin King (martin.king@prairietide.com)