

Prairie Tide Analytical Service Listing – Food and Non-Alcoholic Beverage

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
Egg	ELISA
Milk	ELISA
Mustard	ELISA
Peanut	ELISA
Sesame	ELISA
Soy	ELISA
Antinutrients	
Cyanogenic glucosides/Glucosinolates	<i>In house</i>
Isothiocyanates	<i>In house</i>
Myrosinase Activity	<i>In house</i>
Phytic acid	<i>In house</i>
Total Phenolic Content	AOAC 2017.13
Antioxidants	
Astaxanthin	FCC
Ethoxyquin	AOCS Ce 6-86
Sterols (profile)	<i>In house, HPLC</i>
Tocopherol Acetate	<i>In house</i>
Tocopherols (profile)	<i>In house, HPLC</i>
Colour	
Lovibond	AOCS Cc 13b-45
Gardner	AOCS Td 1a-64
Composition	
Oil Content	<i>In house, NMR</i>
Oil Content in Seed, Meal and Cake	<i>In house, NMR</i>
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	AOCS Cd 1c-85
I ₂ /100g)	
Cholesterol	AOCS Ce 12-16
Ethanol Content (%)	USP

Please contact PTA for pricing.

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



Infrared Absorption (NIR)	<i>In house, NIR</i>	
Insoluble Impurities	AOCS Ca 3a-46	
Iodine Value (g I ₂ /100g)	AOCS Cd 1d-92	
Melamine	<i>In house, NMR</i>	
Mono& Di Glycerides	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	<i>In house</i>	
Phospholipids (Absolute/individual values)	<i>In house</i>	
Refractive Index	<i>In house</i>	
Saponification Value	AOCS Cd 3-25	
Screening for Encapsulation	<i>In house</i>	
Specific Gravity	<i>In house, AOCS To 1b-64</i>	
TOTOX Calculation	USP <401>	
Unsaponifiable Matter	AOCS Ca 6a-40, Ca 6b-53	
Water Activity	<i>In house</i>	
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Toxins		
Aflatoxin	ELISA	
Deoxynivalenol (Vomitoxin)	ELISA	Please contact PTA for pricing.
Fumonisin	ELISA	
Ochratoxin A	ELISA	
T-2 Toxin	ELISA	
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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)