Quality

Premier Analytical Services is a leader in food analysis, promoting excellence in all its activities.

Our comprehensive Quality System, with associated procedures and test methods holds UKAS accreditation to ensure compliance to the International Standard ISO/IEC 17025:2005.

UKAS TESTING
1288

Quality Statement

Premier Analytical Services (PAS) is committed to maintaining the highest standards of quality in all areas of its business. Upholding the integrity and credibility of the testing services provided is of paramount importance to the whole PAS team.

The management of PAS are committed to providing a professional service which fully satisfies our customers' requirements.

We commit ourselves to the establishment of Premier Analytical Services as a leader in our field.

Useful Links

Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

1288

Accredited to ISO/IEC 17025:2005

Premier Foods Group Limited (Trading as Premier Analytical Services)

Issue No: 068 **Issue date:** 02 October 2019

Science Department
The Lord Rank Centre
Lincoln Road
High Wycombe
Buckinghamshire
HP12 3QS

Contact: Eva Hruskova
Tel: +44 (0) 1494 809627
E-Mail: eva.hruskova@premierfoods.co.uk
Website: www.paslabs.co.uk

Testing performed at the above address only

DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests	Documented In-House Method
BAKERY and DAIRY FOOD TYPES	Fructans	C-TM-142 using HPLC with electro-chemical detection
COFFEE and COCOA PRODUCTS	Caffeine	C-TM-068 using HPLC
FOOD CONTACT MATERIALS	1,3-dichloropropan-2-ol 2,3-dichloropropan-1-ol 2- and 3-chloro-propane 1,2-diol	C-TM-069 using GC-MS
MEAT PRODUCTS	Estimation of Meat Content	C-TM-211 By calculation based on Stubbs & Moore using accredited values for protein, fat, moisture and ash
CEREALS AND CEREAL PRODUCTS	Free Amino acids: - Asparagine - Alanine - Aspartic acid - Glutamic acid - Glutamine - Glycine - Isoleucine - Leucine - Phenylalanine - Serine - Threonine - Tyrosine - Valine	C-TM-227 using HPLC
	Ethyl Carbamate	C-TM-226 using GC-MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Methods
FOOD and FOOD PRODUCTS - unspecified	Acrylamide	C-TM-207 using selective bromination and GC-MS/MS
	Ash	C-TM-002
	2- and 3-chloro-1,2-propanediol (2 - MCPD & 3 - MCPD) 1,3 -dichloropropan-2-ol (1,3-DCP) 2,3 - dichloropropan-1-ol (2,3-DCP)	C-TM-069 using GC-MS
	Fatty Acid Esters of: 2-chloropropane-1,2-diol (2-MCPD-E) 3-chloropropane-1,2-diol (3-MCPD-E) Oxiran-2-ylmethanol (Gly-E)	C-TM-297 using pressurised liquid extraction and GC-MS/MS
	Fatty Acid Esters of 3-MCPD	C-TM-258 using GC-MS
	Chloride - water soluble	C-TM-019 using Electrometric titration on aqueous extract
	Cholesterol	C-TM-230 using GC-MS
	Dietary Fibre	C-TM-129 (AOAC)
	Ethanol	C-TM-105 using GC with aqueous extraction
	Energy Available Carbohydrate Salt (from Sodium)	C-SM-015 by calculation
	Fat - total	C-TM-007 using acid hydrolysis and liquid-liquid extraction
	Fat - total	C-TM-267 using NMR
	Fatty Acid Composition: Total Saturates Total Mono-unsaturates Total Poly-unsaturates Omega 3 fatty acids Omega 6 fatty acids	C-TM-009 using GC

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
FOOD and FOOD PRODUCTS – unspecified (cont'd)	Chemical Tests (cont'd)	Documented In-House Method
	Furan 2-Methyl Furan 3-Methyl Furan 2-Ethyl Furan 2,5-Dimethyl Furan	C-TM-225 using headspace GC-MS
	Free Fatty Acids and Peroxide Value	C-TM-028 using titration
DRY SPICES, FATS, OIL-BASED SPICE PASTE and WATER-BASED SPICED SAUCES	Illegal Dyes: Sudan I, Rhodamine B, Sudan II, Para Red, Sudan III, Sudan red G, Sudan IV, Fast Garnet, Sudan Red 7B, Nitroaniline, Butter Yellow, Toluidine Red, Sudan Orange G, Sudan Black, Auramine-O, Orange II, Metanil yellow, Sudan Red B	C-TM-224 using LC-MS/MS
FOOD and FOOD PRODUCTS excluding meat	Melamine	C-TM-263 using LC-MS/MS
FOOD and FOOD PRODUCTS - unspecified	Metals: Aluminium Calcium Copper Iron Magnesium Manganese Potassium Sodium Zinc	C-TM-206 by ICP-OES - Extraction procedure C-TM 205
	Phosphorus	C-TM-214 by ICP-OES - Extraction procedure C-TM 213
	Arsenic Cadmium Lead	C-TM-219 by ICP-OES – Extraction procedure C-TM 218
	Mercury (Total)	C-TM-294 using direct Mercury analyser DMA-80
FRUITS AND VEGETABLES	Tin	C-TM-102 by ICP-OES

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Method
FOOD and FOOD PRODUCTS - unspecified	Moisture content	1) C-TM-001 using oven drying at 102 °C 2) C-TM-037 using oven drying following air/freeze drying
SUGAR SYRUPS and HIGH WATER CONTENT PRODUCTS	Moisture	C-TM-035 using Vacuum oven drying
DRY SUGAR BASED PRODUCTS, SUGAR SYRUPS, SOFT DRINKS and BAKERY MIXES	Sweeteners: Saccharin Acesulfame-K Aspartame	C-TM-139 by HPLC
SWEETENER POWDERS, SUGAR/SWEETENER BLENDS and SOFT DRINKS	Rebaudioside A Stevioside	C-TM-280 by HPLC with UV detection
FOOD and FOOD PRODUCTS - unspecified	Mono and Disaccharides Total Sugars Glucose Fructose Lactose Sucrose Maltose	C-TM-004 using HPLC
	Glucose Fructose Lactose Sucrose	C-TM-242 using ion chromatography with pulsed ampherometric detection
	Nitrogen/crude protein	C-TM-189 using DUMAS Combustion
FOOD and FOOD PRODUCTS INCLUDING SAUCES AND PRESERVES	Titratable acidity	C-TM-115 using titration
	Organic Acids (Citric, Malic,Tartaric, Isocitric)	C-TM-220 by IC/HPLC with detection by conductivity
	Preservative acids (Acetic and Propionic)	C-TM-266 by ion chromatography
	Protein - crude	C-TM-003 using automated Kjeldahl

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
FOOD and FOOD PRODUCTS INCLUDING SAUCES AND PRESERVES (cont'd)	Chemical Tests (cont'd)	Documented In-House Method
	pH	C-TM-100 using pH meter and reference to manufacturers' instructions
	Sodium	C-TM-260 by atomic absorption
	Sorbic and Benzoic Acids	C-TM-043 using GC
	Sulphur dioxide	C-TM-240 by distillation and ion chromatography
	Vitamins	
	Vitamin B_6	C-TM-215 by HPLC with detection by fluorescence
	Thiamin	C-TM-054 by HPLC with detection by fluorescence
	Vitamin A	C-TM-021 by HPLC
	Vitamin C	C-TM-023 by HPLC with detection by fluorescence
	Vitamin D_2 and D_3	C-TM-273 by HPLC
	Vitamin E	C-TM-056 by HPLC with detection by fluorescence
	Niacin Nicotinamide Nicotinic acid	C-TM-265 by LC-MS-MS
	Riboflavin	C-TM-055 by HPLC with detection by fluorescence
FOOD and FOOD PRODUCTS Vitamin Fortified Foods: including cereal based foods, Milk Powders, Bread Products, Yeast Extract, Juices and Fruit Drinks	Folic Acid	C-TM-287 by LC-MS/MS
(excluding Meat, Liver and Cheese)	Vitamin B_{12}	C-TM-285 by LC-MS/MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Method
FOOD AND FOOD PRODUCTS, AND ENVIRONMENTAL SWABS	Allergens	
	Almonds	C-TM-234 using Ridascreen FAST Almond ELISA kit
	Egg White Protein	C-TM-246 using Biokits Egg Assay ELISA kit
	Gluten	C-TM-210 using Ridascreen Gliadin ELISA kit
	Peanut	C-TM-184 using Biokits Peanut Assay ELISA kit
	Soya Protein	C-TM-154 using ELISA Systems Soya Protein ELISA kit
	Mycotoxins:	Documented In-House Method
COFFEE and COCOA PRODUCTS	Ochratoxin A	BA-TM-24 using HPLC with detection by fluorescence
MILK and MILK PRODUCTS	Aflatoxin M_1	BA-TM-25 using HPLC with detection by fluorescence
FUNGAL BIOMASS PRODUCTION	Fusarins	BA-TM-28 using HPLC-MS
	Trichothecenes in Fungal Biomass: 3 Acetyldeoxynivalenol 15 Acetyldeoxynivalenol Deoxynivalenol Diacetoxyscirpenol Fusarenone X HT2 Toxin Neosolaniol Nivalenol T2 Toxin T2 Triol	BA-TM-01 using GC/MS
OILS and FATS	Aflatoxin B_1 B_2 G_1 G_2 Ochratoxin A Zearalenone	BA-TM-14 using HPLC with detection by fluorescence

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Method
	Mycotoxins (cont'd):	
OILS and FATS	Trichothecenes 3 Acetyldeoxynivalenol 15 Acetyldeoxynivalenol Deoxynivalenol Diacetoxyscirpenol Fusarenone X HT2 Toxin Neosolaniol Nivalenol T2 Toxin T2 Triol	BA-TM-06 using GC-MS
FRUIT JUICE AND FRUIT PRODUCTS	*Alternaria* toxins	BA-TM-30 using HPLC-UV
POTATO PRODUCTS	Glycoalkaloids	BA-TM-20 using HPLC
SUGAR SYRUPS	Trichothecenes 3 Acetyldeoxynivalenol 15 Acetyldeoxynivalenol Deoxynivalenol Diacetoxyscirpenol Fusarenone X HT2 Toxin Neosolaniol Nivalenol T2 Toxin T2 Triol	BA-TM-05 using GC-MS
	Aflatoxin B_1 B_2 G_1 G_2 Ochratoxin A Zearalenone	BA-TM-13 using HPLC with detection by fluorescence
FOOD and FOOD PRODUCTS - unspecified	Aflatoxin B_1 B_2 G_1 G_2 - general	BA-TM-10 using HPLC with detection by fluorescence
	Citrinin	BA-TM-19 using HPLC with detection by fluorescence
	Cyclopiazonic acid	BA-TM-29 using HPLC-UV

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Chemical Tests (cont'd)	Documented In-House Method
	Mycotoxins (cont'd):	
FOOD and FOOD PRODUCTS – unspecified (cont'd)	Ergot akaloids - Ergometrine (ergonovine), ergocryptine, ergotamine, ergosine, ergocristine, ergocornine, ergometrinine, ergocryptinine, ergotaminine, ergosinine, ergocristinine, and ergocorninine	BA-TM-33 using LC-MS/MS
	Fumonisins B_1 B_2 B_3	BA-TM-17 using HPLC with detection by fluorescence
	Fumonisins B_1 B_2 B_3	BA-TM-31 using LC-MS/MS
	Moniliformin	BA-TM-26 using HPLC- UV
	Ochratoxin A	1) BA-TM-09 using HPLC with detection by fluorescence 2) BA-TM-15 using Immunoaffinity columns and HPLC with detection by fluorescence
	Patulin	BA-TM-16 using HPLC-UV
	Sterigmatocystin	BA-TM-27 using HPLC with detection by fluorescence
	Zearalenone	BA-TM-11 using HPLC with detection by fluorescence
FOODS and FOOD PRODUCTS - Low moisture samples only (Raw ingredients and finished product)	Trichothecenes 3 Acetyldeoxynivalenol 15 Acetyldeoxynivalenol Deoxynivalenol Diacetoxyscirpenol Fusarenone X HT2 Toxin Neosolaniol Nivalenol T2 Toxin T2 Triol	BA-TM-03 using GC-MS

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Molecular Tests	Documented In-House Method
PASTA (DRIED)	*Triticum aestivum* (authenticity)	C-TM-188 using gel electrophoresis
PROCESSED MATERIALS, SPECIFICALLY , BURGERBUNS, VEGETABLE PUREES, PASTRY AND PIZZA BASES	The Cauliflower Mosaic Virus 35S promoter and the NOS terminator	C-TM-195 using real time PCR
	Quantitative determination of Monsanto MON 40-3-2 (Roundup Ready Soya) and Syngenta Bt176 maize	
FOOD and FOOD PRODUCTS – unspecified (cont'd)	The Cauliflower Mosaic Virus 35S promoter and the NOS terminator	C-TM-195 using real time PCR
	1. Qualitative determination of: GM soya Monsanto MON 40-3-2 (Roundup ready Soya) Bayer A2704-12, Bayer A5547-127, Monsanto MON 89788, Pioneer Hi Bred DP356043-5 The Cauliflower Mosaic Virus 35S promoter and the NOS terminator (cont'd)	C-TM-195 using real time PCR
	2. Qualitative determination of: GM maize Syngenta Bt176, Monsanto MON 810 Syngenta Bt11 Monsanto MON 88017 Monsanto GA21 Monsanto MON 863 Monsanto NK603 Pioneer-Hi bred TC 1507 Pioneer-Hi bred DAS 59122 AgrEvo CBH 351 Bayer T25 Syngenta Bt10 Syngenta MIR 604	C-TM-195 using real time PCR

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
	Molecular Tests (cont'd)	Documented In-House Method
	3. The quantitative detection of: GM soya Monsanto Roundup Ready soya Monsanto MON 89788 Pioneer-Hibred DP356043-5 Bayer A2704-12 Bayer A5547-127	C-TM-195 using real time PCR
FOOD and FOOD PRODUCTS – unspecified (cont'd)	4. The quantitative detection of: GM maize Monsanto MON 88017 Syngenta Bt176, Monsanto GA21 Monsanto MON 863 Monsanto NK603 Pioneer-Hi bred DAS 59122 Syngenta MIR 604	C-TM-195 using real time PCR
UNPROCESSED MATERIALS	The qualitative detection of the following GM varieties:- Potato: BASFEH92-527-1 Rice varieties: Bayer LLRice 62 and unapproved Bt63	C-TM-195 using real time PCR
FOOD and FOOD PRODUCTS	Analysis of Foreign Bodies Including analysis and identification (as relevant and appropriate to material submitted) of:	Documented in house methods F-TM-01 and F-TM-02 in conjunction with (as appropriate)
	Active Alkaline Phosphatase Enzyme	F-TM-24 using nitrophenol phosphate with visual determination of colour change
	α-Amylase	F-TM-32 using visual determination of colour change
	Bone	F-TM-05 using X-ray analysis, compound microscopy and staining
	Blood	F-TM-27 visual determination of colour change using staining

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
FOOD and FOOD PRODUCTS – unspecified (cont'd)	Analysis of Foreign Bodies Including analysis and identification (as relevant and appropriate to material submitted) of: (cont'd)	Documented in house methods F-TM-01 and F-TM-02 in conjunction with (as appropriate)
	Calcium Carbonate	F-TM-30 using X-ray analysis and physical attributes
	Cellulose	F-TM-15 using compound microscopy and staining
	Cell Wall Structures	F-TM-28 using compound microscopy and staining
	Ceramics	F-TM-25 using X-ray analysis and physical attributes
	Crystalline Sugar	F-TM-20 using X-ray analysis, Fourier transform infra-red spectroscopy (FTIR), compound microscopy and physical attributes
	Dental Amalgam	F-TM-17 using X-ray analysis and physical attributes
	Elastomers	F-TM-21 by X-ray analysis and physical attributes
	Fats and Oils	F-TM-06 using compound microscopy and staining
	Fibres	F-TM-04 using X-ray analysis and compound microscopy
	Fungal Hyphae and Spores	F-TM-31 using compound microscopy
	Glass (incl soda-lime glass)	F-TM-03 and F-TM-03a using X-ray analysis and physical attributes
	Lignin	F-TM-07 using compound microscopy and staining
	Metals	F-TM-22 using X-ray analysis and physical attributes

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used
FOOD and FOOD PRODUCTS – unspecified (cont'd)	Analysis of Foreign Bodies Including analysis and identification (as relevant and appropriate to material submitted) of: (cont'd)	Documented in house methods F-TM-01 and F-TM-02 in conjunction with (as appropriate)
	Muscle Fibres	F-TM-14 using compound microscopy and staining
	Nail Clippings	F-TM-19 using Fourier transform infra-red spectroscopy (FTIR) and physical attributes
	Plastics	F-TM-18 using Fourier transform infra-red spectroscopy (FTIR)
	Protein	F-TM-09 using compound microscopy and staining
	Rodent Droppings	F-TM-10 using compound microscopy and physical attributes
	Salt	F-TM-11 using X-ray analysis and physical attributes
	Silica and Silicate Minerals	F-TM-08 using X-ray analysis and physical attributes
	Starch	F-TM-12 using compound microscopy and staining
	Stone Cells	F-TM-23 using compound microscopy and staining
	Struvite	F-TM-16 using X-ray analysis and physical attributes
	Tooth	F-TM-26 using X-ray analysis and physical attributes
	Wood	F-TM-13 using compound microscopy, staining and physical attributes
Bread	Excess Fat/Oil	F-TM-29 using compound microscopy and staining and Fourier transform infra-red spectroscopy (FTIR)

QUALITY POLICY OF PREMIER ANALYTICAL SERVICES

Premier Analytical Services (PAS) is committed to maintaining the highest standards of quality in all areas of its business. Upholding the integrity and credibility of the testing services provided is of paramount importance to the whole PAS team.

The management of PAS are committed to providing a professional service which fully satisfies our customers' requirements.

We commit ourselves to the establishment of Premier Analytical Services as a leader in our field.

Specifically we:

- Have established and will maintain the PAS Quality Management System
- Will ensure the operation of the quality system, associated procedures and all test methods for which PAS holds United Kingdom Accreditation Service (UKAS) accreditation provides our customers at all times with compliance to the International Standard ISO/IEC 17025:2005
- Will agree a testing specification that meets the needs of our customers
- Will deliver testing and services in accordance with agreed specifications
- Will uphold the highest standards of confidentiality and data protection for all our customers
- Will ensure all PAS colleagues are familiar with the quality documentation and implement the policies and procedures in their work
- Will provide training, development and support to our colleagues so that they can take responsibility for the quality of their work
- Will implement continuous improvements in all we do, so improving the effectiveness of our quality management system and being agile in meeting changing demands of the business
- Will encourage a 'right first time' culture
- Will endeavour to be the preferred supplier to our customers through sustained improvement of quality in all aspects of our business, such that our quality is a competitive advantage.

Please note that our UKAS schedule only states our accredited tests. We also offer a wider range of services that although not currently accredited they are covered by this Quality Policy and managed to the same level of quality.