


# Schedule of Accreditation

issued by

## United Kingdom Accreditation Service

21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

|   |  |   |
|---|--|---|
|  <p>Accredited to<br/>ISO/IEC 17025:2005</p> | <b>CCFRA Technology Ltd</b>  |   |
|   | <b>Issue No: 041    Issue date: 27 March 2008</b>                    |   |
|   | <b>Chipping Campden</b><br><b>Gloucestershire</b><br><b>GL55 6LD</b> | <b>Contact: Ms A J Roberts</b><br><b>Tel: +44 (0)1386 842000</b><br><b>Fax: +44 (0)1386 842100</b><br><b>E-Mail: a.roberts@campden.co.uk</b><br><b>Website: www.campden.co.uk</b> |
| <b>Testing performed at the above address only</b>  |  |   |

### DETAIL OF ACCREDITATION

| Materials/Products tested                  | Type of test/Properties measured/Range of measurement  | Standard specifications/ Equipment/Techniques used                                   | Department (See end) |
|--|--|--|----------------------|
| FOODS<br>As specified                      | <u>Chemical and Physical Tests</u>   | Documented In-House Methods:   |                      |
| General                                    | Acidity  | TES-AC-214 based on BS 1741:Part 10:1989 by titration                                | Chem - FC            |
| General                                    | Alcohol  | TES-AC-230 by distillation   | Chem - FC            |
| General                                    | Ash  | TES-AC-086 by incineration   | Chem - FC            |
| Cereals and Cereal Products                | Ash  | TES-AC-283 based on BS 4317:Part 10:1993   | Chem - FC            |
| Water soluble colours extracted from foods | Colours:<br>Identification of permitted and some non-permitted colours - colours as listed in Table A of Method                                | TES-AC-460 using thin layer chromatography   | Chem - FC            |
| Spices, sauces and processed foods         | Dyes:<br>Butter Yellow<br>Orange II<br>Para Red<br>Rhodamine B<br>Sudan I<br>Sudan II<br>Sudan III<br>Sudan IV<br>Sudan Orange<br>Sudan Red 7B | TES-AC-663 using liquid chromatography-electrospray tandem spectrometry (HPLC-MS/MS) | Chem - GC            |
| General                                    | Energy by calculation  | TES-AC-335 using nutritional data  | Chem - FC            |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested      | Type of test/Properties measured/Range of measurement | Standard specifications/ Equipment/Techniques used   | Department (See end) |
|--------------------------------|---|--|----------------------|
| FOODS<br>As specified (cont'd) | <u>Chemical and Physical Tests</u><br>(cont'd)        |  |                      |
| General                        | Fat   | 1) TES-AC-378 using Werner Schmidt extraction (acid hydrolysis)  | Chem - FC            |
|                                |   | 2) TES-AC-536 using Weibull-Stoldt extraction (acid hydrolysis followed by Soxtec extraction) and crude fat (Soxtec extraction)  | Chem - FC            |
|                                |   | 3) TES-AC-628 using CEM SmartTrac NMR Fat Analyser   | Chem - FC            |
| Milk and Milk Products         | Fat   | 1) TES-AC-202 using Rose-Gottlieb extraction   | Chem - FC            |
|                                |   | 2) TES-AC-268 by Gerber method based on BS 696:Parts 1 and 2: 1989   | Chem - FC            |
| General                        | Butter fat content (milk fat)                         | TES-AC-537 analysis of butyric acid methyl ester after trans-esterification of fat by sodium methylate                           | Chem - GC            |
| Oils and Fats                  | Free fatty acids                                      | TES-AC-211 based on BS EN ISO 660:2000 using titration   | Chem - FC            |
| General                        | Fatty acid profile                                    | TES-AC-090 using gas chromatography  | Chem - GC            |
| General                        | Fibre - Crude fibre                                   | TES-AC-226 based on the Feedingstuffs (Sampling and Analysis) Regulations, SI No 1663, 1999 after overnight oven drying at 102°C | Chem - FC            |
| General                        | Fibre - Dietary fibre                                 | TES-AC-203 based on Journal of AOAC International, Volume 75, No 3, Method 991-43  | Chem - FC            |
| General                        | Fibre - Dietary fibre as non-starch polysaccharides   | TES-AC-088 Englyst procedure   | Chem - FC            |



1079

Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested               | Type of test/Properties measured/Range of measurement   | Standard specifications/ Equipment/Techniques used  | Department (See end) |
|---|---|---|----------------------|
| FOODS<br>As specified (cont'd)          | <u>Chemical and Physical Tests</u><br>(cont'd)  |   |                      |
| Fish and Fish Products                  | Fish content (Apparent)   | TES-AC-334 by documented calculation  | Chem - FC            |
| Fish and Uncooked Breaded Fish Products | Fish Species identification (qualitative)   | TES-AC-621 using PCR-Restriction Fragment Length Polymorphism, using Agilent 2100 Bioanalyser and including the flexibility to validate for additional fish species | Chem - BC            |
| General                                 | Gluten  | TES-AC-420 quantitative determination using Gluten Assay Kit from Tepnel Biosystems   | Chem - BC            |
| Raw and Processed Foods                 | Gluten (>5ppm)  | TES-AC-648 by immunoassay using R-Biopharm Ridascreen Gliadin kit   | Chem - BC            |
| Meat and Meat Products                  | Hydroxyproline  | TES-AC-490 based on BS 4401:Part 11:1995  | Chem - FC            |
| Oils                                    | K value, determination of   | TES-AC-462 by spectrophotometry   | Chem - FC            |
| General                                 | Metals:<br>Sodium, Potassium, Aluminium, Iron, Copper, Zinc, Manganese, Tin, Chromium, Nickel, Calcium, Magnesium | TES-AC-099 using atomic absorption spectroscopy   | Chem - FC            |
| General                                 | Arsenic   | TES-AC-207 using atomic absorption spectroscopy   | Chem - FC            |
| General                                 | Lead and Cadmium  | TES-AC-100 using atomic absorption spectroscopy   | Chem - FC            |
| General                                 | Lead and Cadmium  | TES-AC-686 by ICPMS after pressure digestion and against criteria specified in EU Regulation 333/2007   | Chem - FC            |
| Raw and Processed Foods                 | Mercury   | TES-AC-206 using atomic absorption spectroscopy   | Chem - FC            |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested                          | Type of test/Properties measured/Range of measurement   | Standard specifications/ Equipment/Techniques used  | Department (See end) |
|--|---|---|----------------------|
| FOODS<br>As specified (cont'd)                     | <u>Chemical and Physical Tests</u><br>(cont'd)  |   |                      |
| General  | Phosphorus  | TEC-AC-095 using colorimetry  | Chem - FC            |
| Meat and Meat Products                             | Meat content (apparent) and added water   | TES-AC-334 by documented calculation  | Chem - FC            |
| Meat and Meat Products                             | Meat species identification (qualitative)   | TES-AC-475 using immunoassay test (Tepnel Diagnostics Ltd Kit)                                    | Chem - FC            |
| General  | Moisture  | 1) TES-AC-097 by oven drying<br><br>2) TES-AC-628 using CEM SmartTrac Microwave Moisture Analyser | Chem - FC            |
| Milk and Milk Products                             | Moisture  | TES-AC-271 based on BS 1741:Part 2:1990   | Chem - FC            |
| Butter   | Moisture  | TES-AC-279 based on BS 5086:Part 2:1984   | Chem - FC            |
| Cheese and Cheese Products                         | Moisture  | TES-AC-281 based on BS 770:Part 2:1976  | Chem - FC            |
| Cereals, Nuts, Fatty Foods, Spices and Dried Fruit | Mycotoxins: Aflatoxins G <sub>2</sub> , G <sub>1</sub> , B <sub>2</sub> and B <sub>1</sub>  | TES-AC-175 using HPLC with fluorescence detection   | Chem - GC            |
| Cereals, Dried Fruit, Coffee and Spices            | Mycotoxins: Ochratoxin A  | TES-AC-332 using HPLC with fluorescence detection   | Chem - GC            |
| Cereals and processed Cereal products              | Mycotoxins:<br>Deoxynivalenol<br>3-Acetyl-deoxynivalenol<br>15-O-Acetyl-4-deoxynivalenol<br>Diacetoxyscirpenol<br>Fusarenon-X<br>Neosolaniol<br>Nivalenol<br>T-2 Toxin<br>HT-2 Toxin<br>Zearalenone | TES-AC-687 using liquid chromatography- electrospray tandem spectrometry (HPLC-MS/MS)             | Chem - GC            |



1079

Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested  | Type of test/Properties measured/Range of measurement  | Standard specifications/ Equipment/Techniques used                                   | Department (See end) |
|--|--|--|----------------------|
| FOODS<br>As specified (cont'd)   | <u>Chemical and Physical Tests</u><br>(cont'd)   |  |                      |
| Fruits, Vegetables and Meats   | Nitrate-Nitrite  | TES-AC-630 using High performance liquid chromatography                              | Chem - GC            |
| Virgin Olive Oil   | Oil adulteration: Qualitative screening for the presence (> ~2% v/v) of unrefined hazelnut oil   | TES-AC-609 extraction and TES-AC-661 PCR using TaqMan 7700 sequence detection system | Chem - BC            |
| Raw and Processed Foods  | Organic Nitrogen (crude protein)   | TES-AC-087 using Kjeltec system  | Chem - FC            |
| Raw and processed foods  | Peanut content (>1ppm)   | TES-AC-425 ELISA technique using Tepnel Peanut Assay Kit                             | Chem - BC            |
| Oils and Fats  | Peroxide value   | TES-AC-511 based on BS 6842:14:2001 using titration                                  | Chem - FC            |
| Fruits and Vegetables  | Pesticide residues:<br>Total Dithiocarbamates residues expressed as CS <sub>2</sub>  | TES-AC-003 using Gas liquid chromatography   | Chem - GC            |
| Fruits and Vegetables, Fresh Herbs, Cereals, Cereal Products and Pulses, Nuts, Fats and Oils | Pesticide Residues:<br>2,4-DDD (o,p-DDE)<br>2,4-TDE (o,p-TDE)<br>4,4-DDE (p,p-DDE)<br>4,4-DDT (p,p-DDT)<br>4,4-TDE (p,p-TDE)<br>Aldrin<br>Bromophos-ethyl<br>Bromophos-methyl<br>Captan<br>Chlorfenvinphos<br>Chlorpyrifos-ethyl<br>Chlorpyrifos-methyl<br>Diazinon<br>Dichlofluanid<br>Dichlorvos<br>Dicofol<br>Dieldrin<br>Dimethoate<br>Endosulfan<br>Endrin<br>Ethion<br>Ethoprophos | TES-AC-072 using GC-MS, GC-ECD or GC-FPD detection where relevant                    | Chem - GC            |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested   | Type of test/Properties measured/Range of measurement   | Standard specifications/ Equipment/Techniques used                      | Department (See end) |
|---|---|---|----------------------|
| FOODS<br>As specified (cont'd)  | <u>Chemical and Physical Tests</u><br>(cont'd)  |   |                      |
| Fruits and Vegetables,<br>Fresh Herbs, Cereals,<br>Cereal Products and<br>Pulses, Nuts, Fats and<br>Oils (cont'd) | Pesticide Residues: (cont'd)<br><br>Etrimfos<br>Fenitrothion<br>$\alpha$ -HCH<br>$\beta$ -HCH<br>$\gamma$ -HCH<br>Heptachlor<br>Heptachlor Epoxide<br>Heptenophos<br>Hexachlorobenzene<br>Malathion<br>Malaaxon<br>Methacrifos<br>Methidathion<br>Mevinphos<br>Parathion-ethyl<br>Parathion-methyl<br>Phosphamidon<br>Pirimiphos-methyl<br>Quintozene<br>Tecnazene<br>Triazophos<br>Vinclozolin |   | Chem - GC            |
| Fruits and Vegetables   | Pesticide Residues:<br>Bendiocarb<br>Bromopropylate<br>Buprofezin<br>Chlorpropham<br>Lambda Cyhalothrin<br>Cypermethrin<br>Deltamethrin<br>Dicloran<br>Diphenylamine<br>Fenarimol<br>Fenpropathrin<br>Fenvalerate<br>Fonophos<br>Mecarbam<br>Metalaxyl<br>Pendimethalin<br>Permethrin<br>Phenthoate   | TES-AC-072 using GG-MS,<br>GC-ECD or GC-FPD detection<br>where relevant | Chem - GC            |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested            | Type of test/Properties measured/Range of measurement   | Standard specifications/ Equipment/Techniques used  | Department (See end)       |
|--------------------------------------|---|---|----------------------------|
| FOODS<br>As specified (cont'd)       | <u>Chemical and Physical Tests</u><br>(cont'd)  |   |                            |
| Fruits and Vegetables<br>(cont'd)    | Pesticide Residues: (cont'd)<br><br>2-phenyl phenol<br>Phosalone<br>Pirimiphos ethyl<br>Profenophos<br>Pyrazophos<br>Quinalphos<br>Tetrachlovinphos<br>Tetradifon<br>Tolclofos methyl | TES-AC-072 using GG-MS,<br>GC-ECD or GC-FPD detection<br>where relevant   | Chem - GC                  |
| General                              | Salt (chloride)   | 1) TES-AC-093 Mohr titration<br>on ashed samples<br><br>2) TES-AC-205 using Volhard<br>titration  | Chem - FC<br><br>Chem - FC |
| General                              | Solids - Refractometer Solids<br>(BRIX)   | TES-AC-183 using<br>refractometry expressed in<br>terms of % sugar (w/w) at 20°C  | Chem - FC                  |
| Butter                               | Solids - not fat  | TES-AC-280 based on EC<br>Regulation 213/2001,<br>Annex X (Article 8) and<br>Annex XI (Article 8)   | Chem - FC                  |
| Soya based foods and<br>ingredients  | Soya (GM): Quantitative<br>determination of Roundup Ready<br>Soya   | TES-AC-613 using real-time<br>PCR amplification of DNA using<br>TaqMan and detection of DNA<br>sequences using Fluorescence<br>Resonance Energy Transfer<br>chemistry | Chem - BC                  |
| Raw materials and<br>processed foods | Soya (GM): Screening for<br>genetically modified maize or soya<br>DNA using Cauliflower Mosaic<br>Virus 35S promoter, NOS<br>terminator Bt11 maize or Bt176<br>maize DNA              | TES-AC-662 using PCR and gel<br>electrophoresis   | Chem - BC                  |
| General                              | Sugars: Total/ reducing sugar<br>(> 2% total sugar)   | TES-AC-101 using Lane and<br>Eynon titration  | Chem - FC                  |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested  | Type of test/Properties measured/Range of measurement | Standard specifications/ Equipment/Techniques used  | Department (See end) |
|--|---|---|----------------------|
| FOODS<br>As specified (cont'd)                                       | <u>Chemical and Physical Tests</u><br>(cont'd)        |   |                      |
| General  | Sugars: Glucose, fructose, sucrose and lactose        | TES-AC-444 by enzyme test kit   | Chem - FC            |
| General  | Sugars: Starch/Glucose                                | TES-AC-272 based on EC Regulation 4154/87, Annex 1  | Chem - FC            |
| Sugars   | Sugars: Sucrose                                       | TES-AC-292 using polarimetry based on EC Commission Directive 79/796/EEC, Annex II, Method 10 | Chem - FC            |
| Cane or Beet Molasses  | Sugar content as apparent Sucrose                     | TES-AC-684 using Herzfeld and Clerget double polarisation method                              | Chem - FC            |
| General  | Sulphur dioxide                                       | TES-AC-094 using Monier-Williams distillation   | Chem - FC            |
| Milk and Milk Products   | Vitamin A   | TES-AC-443 using saponification and HPLC with UV detection                                    | Chem - GC            |
| Food and Drink   | Vitamin C   | TES-AC-474 using HPLC with UV detection of ascorbic acid adapted from EN 14130:2003           | Chem - GC            |
| Milk and Milk Products   | Vitamin D3  | TES-AC-481 using saponification and HPLC with electrochemical detection                       | Chem - GC            |
| General  | Vitamin E   | TES-AC-438 using alkaline hydrolysis and HPLC with electrochemical detection                  | Chem - GC            |
| BEVERAGES<br>As specified  | <u>Chemical and Physical Tests</u>                    | Documented In-House Methods:  |                      |
| Beverages  | Acesulfam-K   | TES-AC-465 using HPLC   | Chem - GC            |
| Alcoholic Beverages  | Alcohol content                                       | TES-AC-230 by distillation and specific gravity   | Chem - FC            |
| Neutral Spirits, Beverages, Distillates and Foods Containing Alcohol | Alcoholic strength                                    | TES-AC-567 determination by volume using electronic densitometer                              | Chem - FC            |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested                 | Type of test/Properties measured/Range of measurement  | Standard specifications/ Equipment/Techniques used  | Department (See end) |
|---|--|---|----------------------|
| <b>BEVERAGES</b><br>As specified (cont'd) | <u>Chemical and Physical Tests</u><br>(cont'd)   |   |                      |
| Beverages                                 | Aspartame  | TES-AC-464 using HPLC   | Chem - GC            |
| Beverages and other Foodstuffs            | Preservatives:<br>Benzoic and sorbic acids   | TES-AC-023 using HPLC   | Chem - GC            |
| Beverages                                 | Saccharin  | TES-AC-463 using HPLC   | Chem - GC            |
| Fruit Juice and Soft Drinks               | Vitamin C  | TES-AC-208 using DCPIP titration  | Chem - GC            |
| <b>PLASTIC PACKAGING MATERIALS</b>        | <u>Chemical and Physical Tests</u>   | Documented In-House Methods   |                      |
|   | Global (overall) migration from packaging materials into olive oil food simulants by total immersion | TES-AC-500 based on BS EN 1186:2002   | Chem - FC            |
|   | Global (overall) migration from packaging materials into aqueous food simulants by total immersion   | TES-AC-501 based on BS EN 1186:2002   | Chem - FC            |
| <b>WHEAT and MILLED PRODUCTS</b>          | <u>Chemical and Physical Tests</u>   | Documented In-House Methods. Those based on Flour Testing Working Group (FTWG) requirements are documented in CCFRA Guideline No 3, Manual of Methods for Wheat and Flour Testing, Third Edition 2002 |                      |
|   | Alpha-Amylase activity   | TES-CM-118 based on FTWG 18 using the Ceralpha reagent  | C&M                  |
|   | Ash  | TES-CM-112 based on FTWG 12 derived from BS 4317:Part 10:1993   | C&M                  |
|   | Falling Number   | TES-CM-106 based on FTWG 06 derived from ICC Standard Method 107/1  | C&M                  |
|   | Flour Colour Grade   | TES- CM-107/3 and TES-CM-107/4 based on FTWG, 07/3 and 07/4 based on industry practice  | C&M                  |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested                                 | Type of test/Properties measured/Range of measurement  | Standard specifications/ Equipment/Techniques used  | Department (See end) |
|---|--|---|----------------------|
| WHEAT and MILLED PRODUCTS (cont'd)                        | <u>Chemical and Physical Tests</u> (cont'd)  |   |                      |
|   | Hectolitre Weight  | TES-CM-12 using KERN 822/403 electronic system  | C&M                  |
|   | Milling Analysis   | TES-CM-01 by Laboratory Buhler Milling  | C&M                  |
|   | Moisture   | 1) TES-CM-108 based on FTWG 08 by oven drying based on ICC Standard Method 110/1              | C&M                  |
|   |  | 2) TES-CM-114 based on FTWG 14 by NIR derived from ICC Recommendation No 202                  | C&M                  |
|   | Protein  | 1) TES-CM-114 based on FTWG 14 by NIR derived from ICC Recommendation No 202                  | C&M                  |
|   |  | 2) TES-CM-119 based on FTWG 19 using Dumas combustion method                                  | C&M                  |
|   | Rheological Properties (Extensograph)  | TES-CM-103 based on FTWG 03 using Brabender Extensograph derived from ICC Standard Method 114 | C&M                  |
|   | Starch damage  | TES-CM-105 based on FTWG 05 based on Cereal Chem 1964 41, No 2 March, pages 98-111            | C&M                  |
| Water absorption and Rheological Properties (Farinograph) | TES-CM-104 based on FTWG 04 using Brabender Farinograph derived from ICC Standard Method 115/1 | C&M   |                      |
| Zeleny Sedimentation Volume                               | TES-CM-044 based on ICC Standard 116/1 and 118   | C&M   |                      |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested   | Type of test/Properties measured/Range of measurement         | Standard specifications/ Equipment/Techniques used  | Department (See end) |
|---|---|---|----------------------|
| FOODS, ANIMAL FEEDINGSTUFFS and ENVIRONMENTAL SAMPLES<br>As specified | <u>Microbiological Tests</u>                                  | Documented In-House Methods   |                      |
| General   | Enumeration of micro-organisms:<br>Aerobic plate count (30°C) | TES-MB-002 based on BS EN ISO 4833:2003, using Plate Count Agar                                   | Micro                |
| Dairy and Milk products   | Aerobic plate count (30°C)                                    | TES-MB-001 based on BS EN ISO 4833:2003, using Milk Plate Count Agar                              | Micro                |
| General   | Anaerobic plate count   | TES-MB-024 using pour plate technique and anaerobic incubation at 30°C                            | Micro                |
| General   | <i>Bacillus cereus</i> , Presumptive                          | TES-MB-003 based on BS EN ISO 7932:2004   | Micro                |
| General   | <i>Clostridium perfringens</i>                                | TES-MB-004 based on BS EN ISO 7937:2004   | Micro                |
|   | Presumptive coliforms   | TES-MB-005 based on BS ISO 4832:2006  | Micro                |
| General   | Enterobacteriaceae, Presumptive                               | TES-MB-006 based on BS ISO 21528-2:2004   | Micro                |
| General   | <i>Enterococcus</i> spp (faecal streptococci), Presumptive    | TES-MB-016 based on BS 4285:Sub-Section 3.11:1985   | Micro                |
| General   | <i>Escherichia coli</i> , Presumptive                         | TES-MB-007 based on BS 5763:Part 13:1998  | Micro                |
| Raw Produce - Salads, Fruit and Vegetables                            | <i>Escherichia coli</i> , Presumptive                         | TES-MB-176 using membrane method on tryptone bile x-glucuronide agar based on BS ISO 16649-1:2001 | Micro                |
| General   | Lactic acid bacteria, Presumptive                             | TES-MB-009 based on BS ISO 15214:1998   | Micro                |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested  | Type of test/Properties measured/Range of measurement   | Standard specifications/ Equipment/Techniques used   | Department (See end) |
|--|---|--|----------------------|
| FOODS, ANIMAL FEEDINGSTUFFS and ENVIRONMENTAL SAMPLES<br>As specified (cont'd) | <u>Microbiological Tests</u> (cont'd)   |  |                      |
| General  | Enumeration of micro-organisms:<br>(cont'd)<br><br><i>Listeria monocytogenes</i> and<br><i>Listeria</i> spp | 1) TES-MB-175 colony count at 30°C based on BS EN ISO 11290-2:1998 (excluding amendment no 1) using Palcam Agar<br><br>2) TES-MB-186 colony count at 37°C based on BS EN ISO 11290-2:1998 incorporating amendment no 1:2004 using <i>Listeria</i> chromogenic agar | Micro                |
| General  | <i>Pseudomonas</i> species at 25°C  | TES-MB-012 based on BS 7857 Part1:1996 (ISO 13720:1995)  | Micro                |
| General  | Coagulase-positive Staphylococci  | TES-MB-015 based on BS EN ISO 6888-1:1999  | Micro                |
| General  | Sulphite reducing clostridia,<br>Presumptive  | TES-MB-043 based on BS EN ISO 15213:2003   | Micro                |
| Foods,<br>Animal feedingstuffs and<br>Environmental samples<br>with pH > 4.5   | Yeasts and moulds   | TES-MB-147 using RBCA spread plate at 25°C based on Manual of Microbiological Methods for the Food and Drink Industry, CCFRA Guideline No 43, Method 2.1.1 (2007)  | Micro                |
| Foods,<br>Animal feedingstuffs and<br>Environmental samples<br>with pH ≤ 4.5   | Yeasts and moulds   | TES-MB-148 using acidified MEA spread plate at 25°C based on Manual of Microbiological Methods for the Food and Drink Industry, CCFRA Guideline No 43, Method 2.1.1 (2007)   | Micro                |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested  | Type of test/Properties measured/Range of measurement | Standard specifications/ Equipment/Techniques used  | Department (See end)   |       |
|--|---|---|--|-------|
| FOODS, ANIMAL FEEDINGSTUFFS and ENVIRONMENTAL SAMPLES<br>As specified (cont'd) | <u>Microbiological Tests</u> (cont'd)                 |   |  |       |
|  | Detection of:   |   |  |       |
|  | General   | <i>Listeria</i> species including <i>L. monocytogenes</i>                                     | TES-MB-010 based on FDA, 1988; Walker et al, 1990; Warburton et al, 1991 and Robinson and Cunningham, 1991 using enrichment and selective plating techniques | Micro |
|  | General   | <i>Listeria monocytogenes</i> and <i>Listeria</i> species                                     | TES-MB-174 enrichment technique at 37°C based on BS EN ISO 11290-1:1997 incorporating amendment no 1   | Micro |
|  | General   | <i>Salmonella</i> species   | TES-MB-178 based on BS EN ISO 6579:2002  | Micro |
|  | General   | <i>Vibrio parahaemolyticus</i>  | TES-MB-019 based on BS 5763-14:1991  | Micro |
| Seafood/Seafood Products   | <i>Vibrio cholerae</i> , Presumptive                  | TES-MB-017 based on PHLS Monograph Series No 11, Furniss, A L, Lee, J V and Donovan, T J:1978 | Micro  |       |
| FOODS  | <u>Chemical and Physical Tests</u>                    | Documented In-House Methods:  |  |       |
|  | General   | Water Activity ( $A_w$ )  | TES-MB-042 using Aqualab CX3 machine based on BS ISO 21807:2004  | Micro |
| DISINFECTANTS AND ANTISEPTICS  | <u>Microbiological Tests</u>                          | Documented In-House Methods   |  |       |
|  | Bactericidal Activity - Basic Test                    | BS EN 1040:2005 as amended by MA-FH-003   | Hyg  |       |
|  | Bactericidal Activity - Suspension Test               | BS EN 1276:1997 as amended by MA-FH-004   | Hyg  |       |
|  | Bactericidal and Fungicidal Activity - Surface Test   | BS EN 13697:2001 as amended by MA-FH-017  | Hyg  |       |



1079  
Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

| Materials/Products tested              | Type of test/Properties measured/Range of measurement                          | Standard specifications/ Equipment/Techniques used   | Department (See end) |
|--|--|--|----------------------|
| DISINFECTANTS AND ANTISEPTICS (cont'd) | <u>Microbiological Tests</u> (cont'd)<br>Fungicidal Activity - Suspension Test | BS EN 1650:1998 as amended by MA-FH-006  | Hyg                  |
| FOOD PROCESSING EQUIPMENT              | <u>Microbiological Tests</u><br>Assessment of In-Place Cleanability            | Documented In-House Methods<br>TES-FH-002 using soured milk and <i>Bacillus stearothermophilus</i> spores based on EHEDG Doc 2, 3 <sup>rd</sup> Edition, July 2004 | Hyg                  |
| FOODS<br>As specified                  | <u>Sensory Tests</u>   | Documented In-House Methods  |                      |
| General                                | Flavour/taint due to atmospheric transfer from chemicals or materials          | TES-S-002 using sensory difference (triangle) tests based on BS 4120:2004  | C&SS                 |
| General                                | Flavour/taint due to contact with materials                                    | TES-S-004 using sensory difference (triangle) tests based on BS 4120:2004  | C&SS                 |
| Fruit and Vegetables                   | Flavour/taint due to pesticides  | TES-S-001 using sensory difference (triangle) tests based on BS 4120:2004  | C&SS                 |
| Canned and Frozen Foodstuffs           | Grading for defects, blemishes, appearance, flavour and texture                | TES-S-003 and TES-S-005 in accordance with CCFRA published specifications  | C&SS                 |
| Ready to Eat Foods                     | Product benchmarking based on assessment of appearance, flavour and texture    | TES-S-023 based on sensory assessment principles in BS 4120:2004   | C&SS                 |
| General                                | Quantitative descriptive analysis  | TES-S-009 based on BS 5929:Part 4:1986 and ISO/DIS 11036 (in press)  | C&SS                 |
| END                                    |  |  |                      |



1079

Accredited to  
ISO/IEC 17025:2005

**Schedule of Accreditation**  
issued by  
**United Kingdom Accreditation Service**  
21 - 47 High Street, Feltham, Middlesex, TW13 4UN, UK

**CCFRA Technology Ltd**  
**Issue No: 041 Issue date: 27 March 2008**

Testing performed at main address only

Each laboratory Department is identified with a code

|           |  |
|-----------|--|
| Chem - FC | Chemistry and Biochemistry - Food Composition Group  |
| Chem - GC | Chemistry and Biochemistry - Chromatography Group    |
| Chem - BC | Chemistry and Biochemistry - Molecular Biology Group |
| Micro     | Microbiology   |
| Hyg       | Food Hygiene   |
| C&M       | Cereals and Milling                                  |
| C&SS      | Consumer and Sensory Science                         |