## Schedule of Accreditation



## Scope of Accreditation

## ALS

Biological and Veterinary Testing
Category: A

| Biology/veterinary field - <br> Tests | Test name | Technique | Matrix | Squipment | Std. reference |
| :--- | :--- | :--- | :--- | :--- | :--- |
| liqu Culture of organisms in <br> liquid or agar based culture <br> media with visual or instrument <br> monitoring for growth - .01 <br> Culture of bacteria | Enumeration and Identification <br> of Legionella sp. (presumptive) <br> by Latex <br> agglutination (Legionella <br> pneumophila serogroup 1, <br> Legionella pneumophilla <br> serogroup 2-14, Legionella Sp.) | Membrane Filtration <br> \& Latex <br> Agglutination | Waters - Industrial <br> Waters - Potable <br> water <br> Waters -Swimming <br> pools and spas <br> Waters - Trade <br> waste | N/A | SP182 based on EN ISO 11731:2017 <br> Procedures 8, 9 and 10. Matrix A and <br> B |
|  | Aerobic colony count (48 hours) | Culture of bacteria | Alcoholic beverages <br> (other than wine) <br> Animal feeds <br> Cereals and bakery <br> products <br> Cocoa and cocoa <br> preparations, coffee <br> and tea <br> Confectionery <br> Dairy products <br> Egg and egg <br> products <br> Fats and Oils <br> Fish, shellfish and <br> molluscs | N/A | SP048 based on EN ISO 4833-1: <br> 2013+A1:2022 |


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| :--- | :--- | :--- | :--- |
|  | Foods/stockfoods <br> and their additives <br> Foodstuffs intended <br> for special nutritional <br> uses <br> Fruit and vegetables <br> Herbs and spices <br> Ices and desserts <br> Meat and meat <br> products, game and <br> poultry <br> Non-alcoholic <br> beverages <br> Nuts and nut <br> products, snacks <br> Pet foods <br> Prepared dishes <br> Product contact <br> surfaces <br> Production animals <br> Soups, broths and <br> sauces <br> Surfaces |  |  |
| Aerobic colony count (72 hours) | Alcoholic beverages <br> (other than wine) <br> Animal feeds <br> Cereals and bakery <br> products <br> Cocoa and cocoa <br> preparations, coffee <br> and tea <br> Confectionery <br> Dairy products <br> Egg and egg <br> products <br> Fats and Oils <br> Fish, shellfish and <br> molluscs <br> Foods/stockfoods <br> and their additives <br> Foodstuffs intended <br> for special nutritional <br> uses | N A |  |


|  |  | Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry <br> Non-alcoholic beverages <br> Nuts and nut products, snacks Pet foods <br> Prepared dishes <br> Product contact surfaces <br> Production animals Soups, broths and sauces Surfaces |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Coliforms and E.coli Filters/Membrane Filtration | Membrane Filtration | Waters - <br> Environmental water <br> Waters - Industrial <br> Waters - Potable <br> water <br> Waters - Swimming pools and spas <br> Waters - Seawater <br> Waters - Trade <br> waste <br> Waters - Waste water treatment plant effluent <br> (WWTP effluent) | N/A | SP217 based on EN ISO 9308-1:2014 A1:2016 |
| Counting of Air Settle Plates by TVC or Yeasts and Moulds | Culture of bacteria | Air | N/A | SP197 based on an In House method |
| Detection and Enumeration of Pseudomonas aeruginosa | Membrane Filtration | Non-alcoholic beverages | N/A | SP084 based on ISO 16266:2006 |
|  |  | Waters - <br> Environmental water <br> Waters - Industrial <br> Waters - Potable <br> water | N/A | SP084 based on ISO 16266:2006 |


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| :--- | :--- | :--- | :--- |
|  |  | Waters - Seawater <br> Waters -Swimming <br> pools and spas <br> Waters - Trade <br> waste <br> Waters - Waste <br> water treatment <br> plant effluent <br> (WWTP effluent) |  |
| Detection of Clostridium <br> Perfringens | Culture of bacteria | Dairy products | N/A |
| Detection of Coagulase Positive <br> Staphylococci | SP223 based on Practical Food <br> Microbiology (Roberts and <br> Greenwood) 3rd Edition \& ISO 7937: <br> 2004 and Oxoid Online Manual |  |  |
| Detection of Cronobacter <br> species | Dairy products <br> Product contact <br> surfaces <br> Surfaces | N/A | SP233 based on ISO 6888-3:2003 |


|  |  | uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry <br> Non-alcoholic beverages Nuts and nut products, snacks Pet foods Prepared dishes Product contact surfaces Production animals Soups, broths and sauces Surfaces |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Detection of E.coli O157:H7 by Neogen Reveal | Reveal® test system | Foods/stockfoods and their additives Foodstuffs intended for special nutritional uses <br> Herbs and spices Meat and meat products, game and poultry product contact surfaces Production animals Surfaces | N/A | SP052 based on Neogen 8 hour Reveal |
| Detection of Listeria Species | Culture of bacteria | Alcoholic beverages (other than wine) Animal feeds Cereals and bakery products Cocoa and cocoa preparations, coffee and tea Compost and related materials | N/A | SP039/SP181 based on EN ISO 11290-1:2017 |


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| :--- | :--- | :--- | :--- |
|  | Confectionery <br> Dairy products <br> Egg and egg <br> products <br> Fats and Oils <br> Fish, shellfish and <br> molluscs <br> Foods/stockfoods <br> and their additives <br> Foodstuffs intended <br> for special nutritional <br> uses <br> Fruit and vegetables <br> Herbs and spices <br> Ices and desserts <br> Meat and meat <br> products, game and <br> poultry <br> Non-alcoholic <br> beverages <br> Nuts and nut <br> products, snacks <br> Pet foods <br> Prepared dishes <br> Product contact <br> surfaces <br> Production animals <br> Soups, broths and <br> sauces <br> Surfaces |  |
| Detection of Listeria Species <br> using the ALOA One Day <br> Method |  |  |
| Alcoholic beverages |  |  |
| (other than wine) |  |  |
| Animal feeds |  |  |
| Cereals and bakery |  |  |
| products |  |  |
| Cocoa and cocoa |  |  |
| preparations, coffee |  |  |
| and tea |  |  |
| Compost and related |  |  |
| materials |  |  |
| Confectionery |  |  |
| Dairy products |  |  |$\quad$| N/A |
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|  |
| Disteria ELISA |
| Sotection of Listeria Spp by |
| Lis |


| Egg and egg products <br> Fats and Oils <br> Fish, shellfish and molluscs <br> Foods/stockfoods and their additives <br> Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry <br> Non-alcoholic beverages <br> Nuts and nut products, snacks <br> Pet foods <br> Prepared dishes <br> Product contact <br> surfaces <br> Production animals <br> Soups, broths and <br> sauces <br> Surfaces |  |  |
| :---: | :---: | :---: |
| Alcoholic beverages (other than wine) <br> Animal feeds Cereals and bakery products <br> Cocoa and cocoa preparations, coffee and tea <br> Confectionery <br> Dairy products <br> Egg and egg products <br> Fats and Oils <br> Fish, shellfish and | DSX ${ }^{\text {TM }}$ and DS2 ${ }^{\text {TM }}$ <br> Automated ELISA <br> Systems | SP154 based on Solus Listeria ELISA Kit Instructions (AFNOR approved) and confirmed by SP181 EN ISO 112901:2017 |


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| molluscs <br> Foods/stockfoods and their additives Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry <br> Non-alcoholic beverages <br> Nuts and nut products, snacks <br> Pet foods <br> Prepared dishes <br> Product contact surfaces <br> Production animals Soups, broths and sauces <br> Surfaces |  |  |
| :---: | :---: | :---: |
| Fish, shellfish and molluscs Meat and meat products, game and poultry | N/A | SP180 based on ISO 4831:2006 |
| Dairy products Product contact surfaces Surfaces | N/A | SP225 based on ISO 7251:2005 |
| Dairy products Product contact surfaces Surfaces | N/A | SP224 based on EN ISO 215281:2017 |
| Alcoholic beverages (other than wine) Animal feeds Cereals and bakery | N/A | SP038/SP178 based on ISO 65791:2017 A1:2020 and BEIC method. |


| Netection of Salmonella spp by |
| :--- |
| Solus Salmonella ELISA |
|  |


| products <br> Cocoa and cocoa preparations, coffee and tea <br> Confectionery <br> Compost and related materials <br> Dairy products <br> Egg and egg <br> products <br> Fats and Oils <br> Fish, shellfish and molluscs <br> Foods/stockfoods and their additives Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry <br> Non-alcoholic beverages <br> Nuts and nut products, snacks <br> Pet foods <br> Prepared dishes <br> Product contact <br> surfaces <br> Production animals Dust, boot swabs and faecal matter Soups, broths and sauces Surfaces |  |  |
| :---: | :---: | :---: |
| Alcoholic beverages (other than wine) Animal feeds Cereals and bakery | $\begin{aligned} & \mathrm{DSX}^{\mathrm{TM}} \text { and } \\ & \mathrm{DS2}^{\mathrm{TM}} \\ & \text { Automated } \end{aligned}$ | SP102 based on Solus Salmonella ELISA Kit Instructions (AFNOR approved) and confirmed by SP178 based on ISO6579-1:2017 A1:2020 |


|  |  | products <br> Cocoa and cocoa preparations, coffee and tea <br> Compost and related materials <br> Confectionery <br> Dairy products <br> Egg and egg <br> products <br> Fats and Oils <br> Fish, shellfish and molluscs <br> Foods/stockfoods and their additives Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry <br> Non-alcoholic beverages <br> Nuts and nut products, snacks <br> Pet foods <br> Prepared dishes <br> Product contact <br> surfaces <br> Production animals Soups, broths and sauces <br> Surfaces | ELISA Systems |  |
| :---: | :---: | :---: | :---: | :---: |
| Enumeration and confirmation of coagulase positive staphylococci | culture of bacteria | Alcoholic beverages (other than wine) Animal feeds Cereals and bakery products Cocoa and cocoa | N/A | SP036 based on EN ISO 6888-1:2021 |


|  |  | preparations, coffee and tea Confectionery Dairy products Egg and egg products <br> Fats and Oils Fish, Shellfish and molluscs Food/stock foods and their additives Foodstuff intended for special nutritional uses <br> Fruit and vegetables herbs and spices Ices and desserts Meat and meat products, game and poultry Non-alcoholic beverages Nuts and nut products, snacks pet foods prepared dishes product contact surfaces production animals soups, broth and sauces surfaces |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Enumeration of Coliforms (Presumptive \& Confirmed) | Culture of bacteria | Alcoholic beverages (other than wine) Animal feeds Cereals and bakery products Cocoa and cocoa preparations, coffee and tea Confectionery Dairy products Egg and egg | N/A | SP035 based on ISO 4832:2006 |


|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  | products <br> Fats and Oils <br> Fish, shellfish and <br> molluscs <br> Foods/stockfoods <br> and their additives <br> Foodstuff intended <br> for special nutritional <br> uses <br> Fruit and vegetables <br> Herbs and spices <br> Ices and desserts <br> Meat and meat <br> products, game and <br> poultry <br> Non-alcoholic <br> beverages <br> Nuts and nut <br> products, snacks <br> Pet foods <br> Prepared dishes <br> Product contact <br> surfaces <br> Production animals <br> Soups, broths and <br> sauces <br> Surfaces |  |


| Enumeration of aerobic and anaerobic thermophilic spore forming bacteria |  | Dairy products | N/A | SP220 based on ISO/TS 27265:2009 |
| :---: | :---: | :---: | :---: | :---: |
| Enumeration of Anaerobic Microorganisms by colony count technique (Anaerobic Total Viable Count) |  | Alcoholic beverages (other than wine) Cereals and bakery products Dairy products Egg and Egg products Foods/stockfoods and their additives Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Meat and Meat products, game and poultry <br> Non-alcoholic beverages Nuts and nut products, snacks Pet foods Prepared dishes Soups, broths and sauces | N/A | SP129 based on In House Method |
| Enumeration of Campylobacter |  | Meat and meat products, game and poultry | N/A | $\begin{aligned} & \text { SP213 based on EN ISO 10272- } \\ & \text { 2:2017+A1:2023 } \end{aligned}$ |
| Enumeration of Clostridium perfringens in water | Membrane Filtration | Waters - <br> Environmental water <br> Waters - Industrial <br> Waters - Potable <br> water <br> Water - Seawater <br> Waters -Swimming pools and spas <br> Waters - Trade <br> waste <br> Waters - Waste <br> water treatment | N/A | SP207 based on Microbiology of Drinking Water 2021, Part 6 and ISO 14189:2013 |


|  |  | plant effluent (WWTP effluent) |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Enumeration of Clostridium perfringens | Culture of bacteria | Animal feeds Cereals and bakery products <br> Cocoa and cocoa preparations, coffee and tea <br> Confectionery <br> Dairy products <br> Egg and egg <br> products <br> Fats and Oils <br> Fish, shellfish and molluscs <br> Foods/stockfoods and their additives Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry <br> Non-alcoholic beverages <br> Nuts and nut products, snacks Others- Mixed foods Pet foods <br> Prepared dishes <br> Product contact surfaces <br> Production animals Soups, broths and sauces <br> Surfaces | N/A | SP042 based on EN ISO 7937 (2004) |
| Enumeration of Coagulase Positive Staphylococci by RPF |  | Dairy products Product contact | N/A | SP234 based on EN ISO 6888-2:2021 |

$\left.\begin{array}{|l|l|l|l||}\hline & & & \\ \hline \begin{array}{l}\text { Enumeration of culturable } \\ \text { microorganisms }\left(22^{\circ} \mathrm{C} \text { for } 72\right. \\ \left.\text { hours, } 3^{\circ} \text { C for } 24 / 48 \text { hours }\right) \\ \text { Surfaces }\end{array} & \text { culture of bacteria } & \begin{array}{l}\text { Environmental water } \\ \text { Industrial waters } \\ \text { Potable waters } \\ \text { Seawater } \\ \text { Swimming pools and } \\ \text { spas } \\ \text { trade wastes } \\ \text { Waste water } \\ \text { treatment plant } \\ \text { effluent (WWTP } \\ \text { effluent) }\end{array} & \text { N/A }\end{array} \begin{array}{l}\text { SP031 based on ISO 6222 -1999 and } \\ \text { on the microbiology of drinking water } \\ \text { (2020) part -7 }\end{array}\right]$

|  |  | Fats and Oils Fish, shellfish and molluscs <br> Foods/stockfoods and their additives Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry <br> Non-alcoholic beverages Nuts and nut products, snacks Pet foods Prepared dishes Product contact surfaces Production animals Soups, broths and sauces <br> Surfaces |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Enumeration of Enterococci |  | Dairy products Meat and meat products, game and poultry Product contact surfaces Production animals Surfaces | N/A | SP058 based on BS 4285 Section 3.11 1985 |
|  |  | Waters - <br> Environmental water <br> Waters - Industrial <br> Waters - Potable <br> water <br> Waters - Seawater <br> Waters -Swimming pools and spas | N/A | SP071 based on ISO 7899-2 (2000) |


|  |  | Waters - Trade wastes <br> Waters - Waste water treatment plant effluent (WWTP effluent) |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Enumeration of Escherichia coli and Coliform bacteria -Most Probable Number method (Colilert) | Most Probable Number method | Waters - <br> Environmental water <br> Waters - Industrial <br> Waters - Potable <br> water <br> Waters - Seawater <br> Waters -Swimming <br> pools and spas <br> Waters - Trade <br> wastes <br> Waters - Waste water treatment plant effluent <br> (WWTP effluent) | N/A | SP196 based on ISO 9308-2:2012 and the IDEXX Colilert 18 test kit |
| Enumeration of Listeria monocytogenes and Listeria Species | Culture of bacteria | Alcoholic beverages (other than wine) <br> Animal feeds Cereals and bakery products <br> Cocoa and cocoa preparations, coffee and tea <br> Confectionery <br> Compost and related materials <br> Dairy products <br> Egg and egg products <br> Fats and Oils Fish, shellfish and molluscs <br> Foods/stockfoods and their additives Foodstuffs intended for special nutritional uses <br> Fruit and vegetables | N/A | $\begin{aligned} & \text { SP040/SP181 based on EN ISO } \\ & \text { 11290-2:2017 } \end{aligned}$ |


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| :--- | :--- | :--- | :--- |
|  | Herbs and spices <br> Ices and desserts <br> Meat and meat <br> products, game and <br> poultry <br> Non-alcoholic <br> beverages <br> Nuts and nut <br> products, snacks <br> Pet foods <br> Prepared dishes <br> Product contact <br> surfaces <br> Production animals <br> Soups, broths and <br> sauces <br> Surfaces |  |
| Enumeration of mesophilic <br> Lactic acid bacteria | Alcoholic beverages <br> (other than wine) <br> Animal feeds <br> Cereals and bakery <br> products <br> Cocoa and cocoa <br> preparations, coffee <br> and tea <br> Confectionery <br> Dairy products <br> Egg and egg <br> products <br> Fats and Oils <br> Fish, shellfish and <br> molluscs <br> Foods/stockfoods <br> and their additives <br> Foodstuffs intended <br> for special nutritional <br> uses <br> Fruit and vegetables <br> Herbs and spices <br> Ices and desserts <br> Meat and meat <br> products, game and | SP068 based on ISO 15214:1998 |


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| :---: |
| Enumeration of presumptive Bacillus cereus |


| poultry |  |  |
| :--- | :--- | :--- |
| Non-alcoholic |  |  |
| beverages |  |  |
| Nuts and nut |  |  |
| products, snacks |  |  |
| Pet foods |  |  |
| Prepared dishes |  |  |
| Product contact |  |  |
| surfaces |  |  |
| Production animals |  |  |
| Soups, broths and |  |  |
| sauces |  |  |
| Surfaces |  |  |
| Alcoholic beverages | N/A |  |
| (other than wine) |  |  |
| Animal feeds |  |  |
| Cocoa and cocoa |  |  |
| preparations, coffee |  |  |
| and tea |  |  |
| Confectionery |  |  |
| Egg and egg |  |  |
| products |  |  |
| Fats and Oils |  |  |
| Fish, shellfish and |  |  |
| molluscs |  |  |
| Foods/stockfoods |  |  |
| and their additives |  |  |
| Foodstuffs intended |  |  |
| for special nutritional |  |  |
| uses |  |  |
| Fruit and vegetables |  |  |
| Herbs and spices |  |  |
| Ices and desserts |  |  |
| Meat and meat |  |  |
| products, game and |  |  |
| poultry |  |  |
| Non-alcoholic |  |  |
| beverages |  |  |
| Nuts and nut |  |  |
| products, snacks |  |  |
| Pet foods |  |  |
| Prepared dishes |  |  |
|  |  |  |


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| Enumeration of presumptive <br> Bacillus cereus and presumptive <br> Bacilus species |
| Enumeration of presumptive <br> Pseudomonas spp |


| Product contact surfaces Production animals Soups, broths and sauces Surfaces |  |  |
| :---: | :---: | :---: |
| Cereals and bakery products Dairy products | N/A | SP045 based on EN ISO 7932:2004 A1:2020 |
| Alcoholic beverages <br> (other than wine) <br> Animal feeds <br> Cereals and bakery <br> products <br> Cocoa and cocoa <br> preparations, coffee <br> and tea <br> Confectionery <br> Dairy products <br> Egg and egg <br> products <br> Fats and Oils <br> Fish, shellfish and <br> molluscs <br> Foods/stockfoods <br> and their additives <br> Foodstuffs intended <br> for special nutritional <br> uses <br> Fruit and vegetables <br> Herbs and spices <br> Ices and desserts <br> Meat and meat <br> products, game and <br> poultry <br> Non-alcoholic <br> beverages <br> Nuts and nut <br> products, snacks <br> Pet foods <br> Prepared dishes <br> Product contact | N/A | SP046 based on EN ISO 13720: 2010 |



Enumeration of presumptive $\beta$ glucuronidase positive E. coli

| surfaces <br> Production animals Soups, broths and sauces Surfaces |  |  |
| :---: | :---: | :---: |
| Alcoholic beverages (other than wine) <br> Animal feeds Cereals and bakery products <br> Cocoa and cocoa preparations, coffee and tea <br> Confectionery <br> Compost and related materials <br> Dairy products <br> Egg and egg products <br> Fats and Oils <br> Fish, shellfish and molluscs <br> Foods/stockfoods and their additives Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry <br> Non-alcoholic beverages <br> Nuts and nut products, snacks <br> Pet foods <br> Prepared dishes <br> Product contact <br> surfaces <br> Production animals | N/A | SP049 based on ISO 16649-2:2001 |


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| :--- |
| Enumeration of Sulphite <br> Reducing <br> Clostridia <br>  <br> Enumeration of Thermoduric <br> bacteria <br> Enumeration of thermophilic <br> bacteria <br>  <br> Moulds in Milk and Milk <br> products <br> Enumeration of Yeasts and <br> Moulds - products with water <br> activity greater than 0.95 |


| Soups, broths and <br> sauces <br> Surfaces |  |  |
| :--- | :--- | :--- |
| Dairy products <br> Meat and meat <br> products, game and <br> poultry <br> Product contact <br> surfaces <br> Production animals <br> Surfaces | N/A | SP110 based on BS ISO 15213: 2003 |
| Dairy products <br> Product contact <br> surfaces <br> Surfaces | N/A | SP057 based on BS4285-3.2: 1991 |
| Dairy products <br> Product contact <br> surfaces <br> Surfaces | N/A | SP222 based on ISO/TS 27265:2009 |
| Dairy products | N/A | SP216 based on ISO 6611:2004 |
| Alcoholic beverages <br> (other than wine) | N/A | SP133 based on ISO 21527-1:2008 |
| Animal feeds |  |  |
| Cereals and bakery |  |  |
| products |  |  |
| Cocoa and cocoa |  |  |
| preparations, coffee |  |  |
| and tea |  |  |
| Confectionery |  |  |
| Dairy products |  |  |
| Egg and egg |  |  |
| products |  |  |
| Fats and Oils |  |  |
| Fish, shellfish and |  |  |
| molluscs |  |  |
| Foods/stockfoods |  |  |
| and their additives |  |  |
| Foodstuffs intended |  |  |
| for special nutritional |  |  |$~\left(\begin{array}{ll||} & \end{array}\right.$



|  |  | poultry <br> Non-alcoholic <br> beverages <br> Nuts and nut <br> products, snacks <br> Pet foods <br> Prepared dishes <br> Soups, broths and <br> sauces |  |
| :--- | :--- | :--- | :--- |
| Faecal Coliforms MPN Colilert | Most Probable <br> Number method | Waters - <br> Environmental water <br> Waters - Industrial <br> Waters - Potable <br> water <br> Waters -Swimming <br> pools and spas <br> Waters - Trade <br> waste <br> Waters - Waste <br> water treatment <br> plant effluent <br> (WWTP effluent) | N/A |


|  |  | Others - Raw Pastry Pet foods |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Method for the Detection of Thermotolerant Campylobacter |  | Alcoholic beverages (other than wine) Animal feeds Cereals and bakery products <br> Cocoa and cocoa preparations, coffee and tea Confectionery Dairy products Egg and egg products <br> Fats and Oils Fish, shellfish and molluscs Foods/stockfoods and their additives Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry <br> Non-alcoholic beverages Nuts and nut products, snacks Pet foods <br> Prepared dishes Product contact surfaces Production animals Soups, broths and sauces Surfaces | N/A | SP043 based on EN ISO 102721:2017 +A1:2023, Procedures A and B |


|  | SP241 Procedure for the identification and confirmation of presumptive isolated colonies using the Bruker MALDI <br> Biotyper <br> - Salmonella spp <br> - Cronobacter spp <br> - Legionella <br> - Campylobacter <br> - Pseudomonas <br> - Enterobacteriaceae <br> - Coliforms <br> - Listeria <br> - Clostridia <br> - Staphylococci | Mass Spectrometry using the MALDI Biotyper | Colonies | Bruker Maldi Biotyper | SP241 Documented \& Validated In House Method <br> - Legionella (SP182) <br> - Campylobacter (SP043/SP213) <br> - Pseudomonas aeruginosa in Water (SP084) <br> - Enterobacteriaceae (SP033/SP224) <br> - E. coli and Coliforms in Water (SP140/SP217) <br> - Listeria Species <br> (SP039/SP040/SP142/SP154/) <br> - Cronobacter Species (SP096) <br> - Salmonella Species (SP038/SP102/SP178) <br> - Clostridium perfringens (SP042/SP207/SP223) <br> - Coliforms (SP035) <br> - Staphylococci (SP036/SP233) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 805 Detection and/or identification of bacterial, parasite, fungal and viral nucleic acids using appropriate techniques - .01 Nucleic acid probe hybridization, CE marked commercial systems | Method for the isolation and confirmation of Shiga Toxin Producing E. coli (STEC) Serogroups (0157, O111, O26, O103, O145, O45 and O121) following PCR detection of virulence genes | Gene amplification and detection by real-time PCR | Meat and meat products, game and poultry Product contact surfaces Production animals Surfaces | Bio-Rad CFX96 ${ }^{\text {TM }}$ realtime PCR detection system | SP210 based on MLG 5C. 02 |
|  | Method for the real-time PCR detection of virulence genes in Shiga Toxin Producing E. coli (STEC) and of 7 major serogroups (O157, O111, O26, O103, O145, O45 and O121) |  | Meat and meat products, game and poultry Product contact surfaces Production animals Surfaces | Bio-Rad CFX96 ${ }^{\text {TM }}$ realtime PCR detection system | SP209 based on MLG 5C. 02 |

## ALS

## Chemical Testing

## Category: A

| Chemistry Field - Tests | Test name | Analyte | Range of measurement | Matrix | Equipment/technique | Standard reference/SOP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 751 Food testing - . 02 Nutritional analysis | Ash | Ash | 0.1 to $15 \mathrm{~g} / 100 \mathrm{~g}$ | Cereals and bakery products Cocoa and cocoa preparation, coffee and tea <br> Confectionery <br> Dairy products <br> Fish, shellfish and molluscs <br> Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry Nuts and nut products, snacks Pet foods Prepared dishes Soups, broths and sauces | By Furnace | SP149 Documented \& Validated In House Method |
|  | Determination of Fat Content in Dairy by Gerber | Fat | 0.3-90 g/100g | Dairy products | Gerber Principle | SP244 |
|  | Determination of Fat Content in Dairy by Rose Gottlieb |  | 0.1-70 g/100g | Dairy products | Rose Gottlieb | SP245 |


| Determination of Proteins in Foods by Dumas Method using Skalar Primacs 100 Instrument | Nitrogen | 0.04 to $20 \%$ ( $\mathrm{g} / 100 \mathrm{~g}$ ) of Nitrogen | Dairy products, Egg and egg products, Meat and meat products, game, and poultry, Fish, shellfish and molluscs, Soups, broths, and sauces, Cereals and bakery products, Ices and desserts, Fruit and vegetables, Herbs and spices, Cocoa and cocoa preparations, coffee, and tea, Confectionary, Nut and nut products, snacks, Prepared dishes, Foodstuffs intended for special nutritional use, Pet foods | Skalar Primacs | SP246 Documented and validated in house method |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Proteins | $\begin{aligned} & 0.25 \text { to } 100 \% \\ & (\mathrm{~g} / 00 \mathrm{~g}) \text { as Proteins } \end{aligned}$ | Dairy products, Egg and egg products, Meat and meat products, game, and poultry, Fish, shellfish and molluscs, Soups, broths, and sauces, Cereals and bakery products, Ices and desserts, Fruit and vegetables, Herbs and spices, Cocoa and cocoa preparations, coffee, and tea, Confectionary, Nut and nut products, | Skalar Primacs | SP246 Documented and validated in house method |


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| Meat Content and Added water | Added water | N/A | Meat and Meat Products, game and Poultry | Calculation | SP232 Documented \& Validated In House Method |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Meat Content | N/A | Meat and Meat Products, game and Poultry | Calculation | SP232 Documented \& Validated In House Method |
| Moisture and Total Solids | Moisture | 3.0 to $99.0 \mathrm{~g} / 100 \mathrm{~g}$ | Cereals and bakery products Cocoa and cocoa preparation, coffee and tea Confectionery Dairy products Fish, shellfish and molluscs Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and desserts Meat and meat products, game and poultry Nuts and nut products, snacks Pet foods Prepared dishes Soups, broths and sauces | Oven Drying | SP148 Documented \& Validated In House Method |
| pH | pH | 2 to 10 pH units | Alcoholic beverages (other than wine) Cereals and bakery products Dairy products Egg and egg products Foodstuffs intended for special nutritional | pH Meter | SP125 Documented \& Validated In House Method |


|  |  |  | uses <br> Fruits and <br> vegetables <br> Meat and meat <br> products, game <br> and poultry <br> Non-alcoholic <br> beverages <br> Nuts and nut <br> products, snacks <br> Pet foods <br> Prepared dishes <br> Soups, broths and <br> sauces |  |
| :--- | :--- | :--- | :--- | :--- |
| Protein |  |  | Cocoa and cocoa <br> preparations <br> Fruit and <br> vegetables <br> Herbs and spices <br> Ices and desserts <br> Cereals and | LECO analyser |


|  |  |  | coffee and tea Confectionery Dairy products Fish, shellfish and molluscs Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and deserts Meat and meat products, game and poultry Nuts and nut products, snacks Pet foods Prepared dishes Soups, broths and sauces |  | Edition, 2019 - Method 992.15 (39.1.16) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Salt | Na | 0.01 to 10.0\% Salt | Cereals and bakery products Cocoa and cocoa preparations, coffee and tea Confectionery Dairy products Fish, shellfish and molluscs <br> Foodstuffs intended for special nutritional uses <br> Fruit and Vegetables Herbs and spices Ices and deserts Meat and meat products, game and poultry Nuts and nut | By Calculation From Sodium | SP198 Documented \& Validated In House Method |


|  |  |  | products, snacks <br> Pet Foods Prepared dishes Soups, broths and sauces |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sodium |  | 0.004 to $4.0 \% \mathrm{Na}$ | Cereals and bakery products Cocoa and cocoa preparations, coffee and tea Confectionery Dairy products Fish, shellfish and molluscs Foodstuffs intended for special nutritional uses <br> Fruit and vegetables Herbs and spices Ices and deserts Meat and meat products, game and poultry Nuts and nut products, snacks Pet Foods Prepared dishes Soups, broths and sauces | Flame Photometry | SP198 Documented \& Validated In House Method |
| Titratable Acidity | Acidity | 0.1-3.0\% | Liquid Milk, Milk Powder \& Fresh Cream | Calculation | SP242 based on AOAC Official Method 920.14 Acidity of Cheese, (AOAC 21st Edition, Vol 11, 33.7.14) and Pearson's Composition and Analysis of Foods, Longman Scientific and Technical, 9th |


|  |  |  |  |  |  | Edition, 1991 (pg539, 640) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Carbohydrate and energy | Total Carbohydrate and Energy | N/A | Meat and Meat Products, game and Poultry Pet foods Prepared dishes Soups, broths and sauces | Calculation | SP231 Documented \& Validated In House Method |
|  | Water Activity | Water Activity | 0.11 Aw to 1.00 Aw | Cereals and bakery products Cocoa and cocoa preparations, coffee and tea Dairy products Egg and egg products Fish, shellfish and molluscs Foodstuffs intended for special nutritional uses <br> Fruits and vegetables Ices and desserts Meat and meat products, game and poultry Nuts and nut products, snacks Pet foods Prepared dishes Soups, broths and sauces | Water Activity Meter | SP228 based on BS ISO 18787:2017 and Novasina LabMasterAw Meter |
| ```766 Environmental testing (inc waters) - .02 Biochemical oxygen demand``` | $\begin{aligned} & \hline \text { BOD and CBOD } \\ & \text { (Nitrification } \\ & \text { suppressed BOD) } \end{aligned}$ | BOD and cBOD | 1.0 to $10,000 \mathrm{mg} / \mathrm{l} \mathrm{O} 2$ | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant | Dissolved Oxygen Meter | P280 (DO Meter) based on "Methods for the Examination of Waters and Associated Materials", HMSO 19885 Day BOD 11 7522120, "APHA 23rd edition 2017, Standard |


|  |  |  |  | effluent (WWTP effluent) Waters for potable and domestic purposes |  | Methods for the Analysis of Water and Wastewater 5210 and 4500-C" and HACH HQ Series Portable meters user manual. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 766 Environmental testing (inc waters) - . 03 Chemical oxygen demand | Chemical Oxygen Demand | COD | 5-15,000 mg/l O2 | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Spectrophotometer | P210 <br> Spectrophotometer method based on APHA 23rd edition 2017 5220-D |
| 766 Environmental testing (inc waters) - . 05 Inorganic | Alkalinity | CaCO3 | $\begin{aligned} & 10.0-500.0 \mathrm{mg} / \mathrm{l} \\ & \mathrm{CaCO} 3 \end{aligned}$ | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Titration | P214 Titrimetric Method based on APHA 23rd edition 2017 2320-B |
|  | Ammonia | NH3N | $\begin{aligned} & \text { 0.02-80.0 mg/l } \\ & \text { NH3N } \end{aligned}$ | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable | Gallery Autoanalyser | P281 based on APHA 23rd edition 2017 method 4500 NH3 F, and automated colorimetry In-house Method using Gallery Analyser following manufacturer's instructions |


|  |  |  | and domestic purposes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Chloride | Cl | 4-20000 mg/l Cl | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Gallery Autoanalyser | P281 based on APHA 23rd edition 2017 method 4500-CI3 E and automated colorimetry In-house Method using Gallery Analyser following manufacturer's instructions |
| Colour | Colour | 2 to 500 Hazen | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Gallery Autoanalyser | P237 based on APHA 23rd edition 2017 Method 2120B + C |
| Fluoride | F | 0.08 to $2.0 \mathrm{mg} / \mathrm{l}$ F | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Spectrophotometer | P228 SPADNS method based on APHA 23rd edition 2017 4500-F-D |


| Nitrate calculated from T.O.N and Nitrite | NO3N | $1.0-100 \mathrm{mg} / \mathrm{l}$ NO3N | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Gallery Autoanalyser | P281 based on APHA 23rd edition 2017 and automated colorimetry In-house Method using Gallery Analyser following manufacturer's instructions |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nitrite | NO2N | 0.01-7.5 mg/l NO2N | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Gallery Autoanalyser | P281 based on APHA 23rd edition 2017 method 4500 NO2 B, and automated colorimetry In-house Method using Gallery Analyser following manufacturer's instructions |
| Orthophosphate | P | 0.02-40 mg/l | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Gallery Autoanalyser | P281 based on APHA 23rd edition 2017 method $4500-\mathrm{P}$ E and automated colorimetry In-house Method using Gallery Analyser following manufacturer's instructions |
| Sulphate | SO4 | $5.0-500 \mathrm{mg} / \mathrm{l} \mathrm{SO} 4$ | Bore waters Ground waters Industrial waters Surface waters | Turbidity Meter | P243 Turbidimetric Method based on APHA 23rd edition 20174500 - SO42-E |


|  |  |  | Sewage <br> Trade wastes <br> Waste water <br> treatment plant <br> effluent (WWTP <br> effluent) <br> Waters for potable <br> and domestic <br> purposes |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Total Hardness |  |  |  |  |  |


|  |  |  | effluent (WWTP effluent) Waters for potable and domestic purposes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total Oxidised Nitrogen | TON | 0.25-100 mg/l | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Gallery Autoanalyser | P281 based on APHA 23rd edition 2017 method 4500 NO2 H, and automated colorimetry In-house Method using Gallery Analyser following manufacturer's instructions |
| Total Phosphorus | P | $0.1-50 \mathrm{mg} / \mathrm{P}$ | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Spectrophotometer | P207 Ascorbic Acid Method based on APHA 23rd edition 20174500 - P - E |
| Turbidity | Turbidity | 0.1 to 1000 | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable | Turbidity Meter | P239 based on APHA 23rd edition 2017 Method 2130B |


|  |  |  |  | and domestic purposes |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 767 Physical test/measurement -.01 pH | pH | pH | 4.0-10.0 | Bore waters Ground waters Industrial waters Surface waters Sewage <br> Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | pH Meter | P233 Electrometric Method based on APHA 23rd edition 2017 4500-H+ - B |
| 767 Physical test/measurement - .02 Conductivity | Conductivity | Conductivity | 2-6000 $\mu \mathrm{S} / \mathrm{cm}$ | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Conductivity Meter | P284 Based on APHA 23rd edition 2017 Method 2510 |
| $\begin{aligned} & 767 \text { Physical } \\ & \text { test/measurement - . } 03 \\ & \text { Suspended Solids } \end{aligned}$ | Total Suspended Solids | Total Suspended Solids | 5-15,000 mg/l | Bore waters Ground waters Industrial waters Surface waters Sewage Trade wastes Waste water treatment plant effluent (WWTP effluent) Waters for potable and domestic purposes | Gravimetry | P202 Gravimetric Method based on APHA 23rd edition 2017 2540-D |

