



## CERTIFICATE OF ACCREDITATION

*In terms of section 22(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-*

### **MICROCHEM LABORATORY SERVICES (PTY) LTD**

**Co. Reg. No.: 2007/010539/07**

**Facility Accreditation Number: T0393**

is a South African National Accreditation System accredited facility provided that all conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of accreditation, Annexure "A", bearing the above accreditation number for

### **CHEMICAL AND MICROBIOLOGICAL ANALYSIS**

The facility is accredited in accordance with the recognised International Standard

**ISO/IEC 17025:2005**

The accreditation demonstrates technical competency for a defined scope and the operation of a quality management system

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant accreditation symbol to issue facility reports and/or certificates

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**Ms FS Radebe**  
**Acting Chief Executive Officer**

**Effective Date: 11 April 2018**  
**Certificate Expires: 10 April 2023**



## ANNEXURE A SCHEDULE OF ACCREDITATION

Facility Number: **T0393**

**Permanent Address of Laboratory:**

Microchem Laboratory Services  
1st Floor, Fairweather House  
176 Sir Lowry Road  
Woodstock  
Cape Town  
8001

**Technical Signatories:**

Ms I Liedemann (Microbiology: All Methods)  
Mr JG Esterhuizen (Chemistry: S.O.P.C 1, 2, 14, 19, 20, 25, 26, 27, 29, 33, 36, 41, 53, 54, 45)  
Mr S Moses (Microbiology: All Methods)  
Mr K Stungu (Chemistry: S.O.P.C 1, 2, 14, 19, 20, 25, 26, 27, 29, 33, 36, 52, 53, 54, 73, 45, 55, 65, 66, 67, 72)  
Mr S Tsewu (Chemistry: S.O.P.C 1, 2, 14, 19, 20, 25, 26, 27, 29, 33, 36, 52, 53, 54, 73, 45, 55, 56, 65, 66, 67, 72)  
Ms S Banien (Chemistry: S.O.P.C 1, 2, 14, 19, 20, 25, 26, 27, 29, 33, 36, 52, 53, 54, 73, 45, 55, 56, 65, 66, 67, 72)  
Mr R van Kerpel (Pesticides: S.O.P.C 57,63,64)  
Mr PT Hartzenberg (Microbiology : All Methods)  
Mr S Newborn (Pesticides: S.O.P.C 57, 63, 64 )

**Postal Address:**

P O Box 12068  
Mill Street, Gardens  
8010

**Nominated Representative:**

Ms A Stemmers

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**Issue No.:** 26

**Date of Issue:** 05 February 2019

**Expiry Date:** 10 April 2023

| Material or Products Tested                                 | Type of Tests / Properties Measured, Range of Measurement | Standard Specifications, Techniques / Equipment Used                         |
|---|---|--|
| <b>CHEMICAL</b>   |   |  |
| Protein, Seafood, Produce, Dairy, Miscellaneous & Beverages | Determination of % Moisture                               | S.O.P.C No.1: AOAC 950.46<br>Method: Oven Drying                             |
|   | Determination of % Ash                                    | S.O.P.C No.2: AOAC 923.0<br>Method: Ashing by Furnace                        |
|   | Determination of % Salt as Sodium Chloride                | S.O.P.C No.14: AOAC 971.27&<br>Metrohm Application Method:<br>Potentiometric |
|   | Determination of % Acidity                                | S.O.P.C No.19: AOAC 942.15<br>Method: Titration                              |
| Protein, Seafood, Produce, Dairy, Miscellaneous & Beverages | Determination of Total Dietary Fibre                      | S.O.P.C No.20: AOAC 991.43<br>Method: Enzyme gravimetric analysis            |

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|  | The Determination of Total Fat; Saturated Fat; Mono-unsaturated Fat; Poly un-saturated Fat; Trans Fat  | S.O.P.C No.25: AOAC 996.06<br>Method: GC                       |
|  | The Determination of Cholesterol   | S.O.P.C No.26: AOAC 996.06<br>Method: GC                       |
|  | Determination of Total Sugar; % Fructose; % Glucose; % Sucrose; % Maltose; % Lactose   | S.O.P.C No.27: AOAC 982.14<br>Method: HPLC                     |
|  | Determination of Vitamin A & Vitamin E   | S.O.P.C No.29: AACC Method: 86-06 Method: HPLC                 |
|  | Determination of Vitamin C   | S.O.P.C No.33: AOAC 984.26<br>Method: HPLC                     |
|  | Determination of % Nitrogen & % Protein  | S.O.P.C No.36 Method: Dumas combustion method                  |
|  | Determination of Total Sugar by GC; % Fructose, % Glucose, % Sucrose, % Maltose; % Lactose; % Trehalose; % Galactose                               | S.O.P.C No.52 Method: GC                                       |
|  | Determination of % Starch  | S.O.P.C No.53: AOAC 996.11<br>Method: HPLC                     |
|  | Calculation of Glycaemic Carbohydrates   | S.O.P.C No.54  |
|  | Determination of Total Sugar Alcohols in Foods   | S.O.P.C No. 73: Method: Gas Chromatography                     |
| Protein, Seafood, Produce, Dairy, Miscellaneous & Beverages  | Determination of Elemental Content Na, Mg, K, P, Zn, Ca, Cu, Fe, As, Cd, Pb,   | S.O.P.C No.45 Method: ICP OES                                  |
| Water, subtropical fruits, Tea   | Determination of Vitamin B1, Vitamin B2 Vitamin B3 and Vitamin B6  | S.O.P.C No.56 Method: HPLC                                     |
| Residues in Foods and Agricultural Products High Water Content: Pome Fruit, Stone Fruit, Water, Subtropical Fruits and Tea | Quantitative Determination of Pesticide Residues by GC-MS/MS and LC-MS/MS  | S.O.P.C No. 57: EN 15662 Quenchers Method: GC-MSMS and LC-MSMS |
| High Acid Content and High Water Content: Small Fruit and Berries, Citrus Fruit  | Quantitative Determination of (CS <sub>2</sub> by Headspace GC-MS  | S.O.P.C No. 63 Method: GC-MS                                   |
| High Acid Content and High Water Content: Small Fruit and Berries, Citrus Fruit  | Quantitative Determination of Ethephon Residues in Fresh Fruit by LC-MS/MS   | S.O.P.C No.64: Quppe Methods Method: LC-MSMS                   |
| Waters for potable, domestic and industrial purposes   | Determination of Ammonium, Chloride, Cyanide, Fluoride, Nitrate, Nitrite, Phenol, Monochloramine, Free Chlorine, Sulphate and Total Organic Carbon | S.O.P.C No.55 Method: Spectrophotometer                        |
|  | Determination of Conductivity and Total Dissolved Solids   | S.O.P.C No.65 Method: Conductivity meter                       |
|  | Determination of pH  | S.O.P.C No. 66 Method: Ph meter                                |
|  | Determination of Turbidity   | S.O.P.C No.67 Method: Turbidity meter                          |
|  | Determination of Colour  | S.O.P.C No.72 Method: Spectrophotometer                        |

**MICROBIOLOGY**

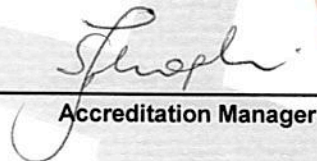
|   |  |                                   |
|---|--|-----------------------------------|
| Protein, Seafood, Produce, RTE/Multi-component foods, Dairy, Swabs & Miscellaneous                      | Enumeration of Total Viable Mesophilic Aerobic Organisms in Foods, Colony Count Technique at 35°C                | S.O.P.M 1C: MFHPB-18              |
| Protein, Seafoods, Produce, RTE Multi Component, Dairy, Miscellaneous & Environmental Samples           | Determination of Virulence Genes in Shiga Toxin Producing <i>Escherichia coli</i> (STEC) using PCR               | S.O.P.M 33: ISO /TS 13136:2012    |
| Protein, Seafoods, Produce, RTE Multi Component, Dairy, Miscellaneous & Environmental Samples and Water | Determination of viable <i>Listeria</i> spp.   | S.O.P.M 7H: AFNOR BRD 07/04-09/98 |
| Protein, Seafoods, Produce, RTE Multi Component, Dairy, Miscellaneous & Environmental Samples and Water | Detection of viable <i>Listeria</i> spp  | S.O.P.M 71: AFNOR BRD 0/16-01/09  |
| Protein, Seafoods, Produce, RTE Multi Component, Dairy, Miscellaneous & Environmental Samples and Water | Detection of Viable <i>Listeria monocytogenes</i> organisms  | S.O.P.M 7B: AFNOR BRD 07/04-09/98 |
| Drinking and Raw Water  | Enumeration of Thermotolerant (Faecal) Coliforms, Membrane Filtration Method at 44°C Without Futher Confirmation | S.O.P.M 28: AFNOR BRD 07/20-03/11 |
|   | Enumeration of Yeasts and Moulds, Colony Technique at 25°C   | S.O.P.M 5B: AOAC 6.1:1997         |
|   | Enumeration of Coliforms, Colony Count Technique at 37°C   | S.O.P.M 2C: ISO 4832              |
|   | Enumeration of viable <i>Escherichia coli</i>  | S.O.P.M 3F:ISO 16649-2            |
|   | Detection of <i>Salmonella</i> spp.  | S.O.P.M 9F: AFNOR BRD 07/11-12/05 |
|   | Enumeration of coagulase-positive staphylococci ( <i>Staphylococcus aureus</i> and other species)                | S.O.P.M 4F: ISO 6888-2            |
|   | Enumeration of <i>Enterobacteriaceae</i> without resuscitation, colony count technique at 37°C                   | S.O.P.M 6A: ISO 7402              |
|   | Detection of viable <i>Listeria monocytogenes</i> organisms  | S.O.P.M 7B: AFNOR BRD 07/04-09/98 |
|   | Quantitative Enumeration of viable <i>Listeria monocytogenes</i> organisms                                       | S.O.P.M 7C: AFNOR BRD 07/05-09/01 |
| Protein, Seafood, Produce, RTE/Multi-component foods, Dairy & Miscellaneous                             | Enumeration of presumptive <i>Bacillus cereus</i> , colony count   | S.O.P.M 12B Oxoid                 |
|   | Enumeration of <i>Clostridium perfringens</i> , colony count technique at 35°C                                   | S.O.P.M 16 Oxoid                  |
| Drinking & Raw water  | The Determination of the Heterotrophic Total Bacteria Bacterial Count in Water at 35°C                           | S.O.P.M 1F:APHA 9215              |

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|--|---|-----------------------------------|
| Drinking & Raw water   | Enumeration of Coliforms in Water, Membrane Filtration Method at 37° C, without Further Confirmation              | S.O.P.M 2F: AFNOR BRD 07/08-12/04 |
|  | Enumeration of <i>Escherichia coli</i> in water, Membrane Filtration Method at 37°C, without further Confirmation | S.O.P.M 3H: AFNOR BRD 07/7-12/04  |
|  | Enumeration of Trmotolerant (faecal) Coliforms, Membrane Filtration method: at 44°C Without Further Confirmation  | S.O.P.M 28: AFNOR BRD 07/20-03/11 |
| Protein, Seafood, Produce, RTE/Multi-component foods & Dairy | Enumeration of Mesophilic Lactic Acid Bacteria  | S.O.P.M 10A: ISO 15214:1998(E)    |
|  | Enumeration of <i>Pseudomonas</i> species, colony count technique at 25°C   | S.O.P.M 11A: ISO 13720            |

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Original Date of Accreditation: 11 April 2008

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM



Accreditation Manager