

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:-

ARC-IRENE ANALYTICAL SERVICES

Facility Accreditation Number: **T0063**

is a South African National Accreditation System accredited Testing Laboratory provided that all SANAS 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 laboratory quality management system

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

Mr R Josias
Acting Chief Executive Officer

Effective Date: 09 December 2009
Certificate Expires: 30 June 2014

ANNEXURE A

SCHEDULE OF ACCREDITATION

Testing Laboratory Number: T0063

<p>Permanent Address of Laboratory: ARC Irene Analytical Services ARC Irene Complex Old Olifantsfontein Road Irene 0062</p> <p>Postal Address: Private Bag X 2 Irene 0062</p> <p>Tel : (012) 672-9292 Fax : (012) 665-1605 E-mail : pbarnes@arc.agric.za</p>	<p>Management Signatory : L E Smit</p> <p>Technical Signatories : P M Barnes (General Chemical, Specialised Techniques) : L E Smit (General Chemical, Specialised Techniques) : J Collier (General Chemical) : B Pretorius (Specialised Techniques) : W Hale (Microbiology)</p> <p>Nominated Representative : P M Barnes</p> <p>Issue No. : 17 Date of issue : 09 December 2009 Expiry date : 30 June 2014</p>	
Materials/Products Tested	Types of Tests/Properties Measured, Range of Measurement	Standard Specifications, Equipment/Techniques Used
<p>SPECIALISED TECHNIQUES</p> <p>Food & Feed</p>	<p>Determination of carbohydrates (Lactose, Sucrose, Glucose, Maltose and Fructose) by HPLC</p> <p>Vitamin B₁ by HPLC</p> <p>Vitamin B₂ by HPLC</p> <p>Gross Energy value</p> <p>Total Vitamin C as dehydro ascorbic acid by HPLC</p> <p>Determination of 17 Amino acids by HPLC</p> <p>Determination of Tryptophan by HPLC</p> <p>Determination of Cystine / Cysteine by HPLC</p> <p>Determination of Cholesterol by GC</p> <p>Determination of Long chain fatty acids by GC</p> <p>Determination of Total Dietary Fibre</p> <p>Total Vitamin A as all-trans-retinol</p> <p>Total Vitamin E as a-tocopherol</p> <p>Total Carbohydrates (calculated)</p> <p>Energy (calculated)</p>	<p>ASM 017</p> <p>ASM 025</p> <p>ASM 071</p> <p>ASM 053</p> <p>ASM 057</p> <p>ASM 021</p> <p>ASM 022</p> <p>ASM 055</p> <p>ASM 056</p> <p>ASM 023</p> <p>ASM 070</p> <p>ASM 072</p> <p>ASM 074</p> <p>ASM 075</p> <p>ASM 076</p>

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Laboratory No: T0063
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Materials/Products Tested	Types of Tests/Properties Measured, Range of Measurement	Standard Specifications, Equipment/Techniques Used
GENERAL CHEMICAL		
Milk and milk products	Salt content by Mohr method	ASM 001
Butter	Moisture by modified Kohman method	ASM 002
	pH (fat free serum)	ASM 003
Milk Powder	Moisture by toluene distillation method	ASM 005
Food	Determination of Fat content based on Röse Gottlieb gravimetric method	ASM 004
Food & Feed	Total Solids/Dry Matter	ASM 013
	Total ash / Organic matter	ASM 048
	Determination of Fat by hydrolysis (Soxtec)	ASM 068
	Total Non structural carbohydrates	ASM 073
Feedstuffs	Crude fibre	ASM 059
	Determination of Fat (Ether Extract) by Soxtec method	ASM 044
	Determination of calcium content. EDTA method	ASM 042
	Determination of Starch content	ASM 043
	Determination of Total Phosphorus content	ASM 045
	Neutral Detergent Fibre (NDF)	ASM 060

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Page 2 of 3

Field Manager

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Materials/Products Tested	Types of Tests/Properties Measured, Range of Measurement	Standard Specifications, Equipment/Techniques Used
MICROBIOLOGY		
Meat and meat products	Enumeration of micro organisms Quarter plate colony count technique at 25° C	ASM 033
	Enumeration of <i>Pseudomonas</i> spp Quarter plate colony count technique at 25° C	ASM 036
	Enumeration of coliforms colony count technique	ASM 037
Food & Feed	Enumeration of <i>Escherichia coli</i> without resuscitation	ASM 039
	Detection of presumptive <i>Salmonella</i> spp.	ASM 009
	Detection of presumptive <i>Listeria monocytogenes</i>	ASM 014
	Enumeration of micro-organisms. Colony count techniques at 30 °C	ASM 018
	Enumeration of Coliforms and <i>E coli</i> Colony count technique	ASM 019
	Enumeration of Yeasts and moulds. Colony count technique at 25° C	ASM 020
	Enumeration, detection and confirmation of coagulase positive <i>Staphylococcus aureus</i>	ASM 024
Liquid milk products	Isolation and enumeration <i>Bacillus cereus</i> . Colony count technique.	ASM 030
	Enumeration of presumptive <i>Enterobacteriaceae</i> Colony count techniques	ASM 031
	Aschaffenburg and Mullen phosphatase test for milk	ASM 049
	Delvotest® SP/Delvotest® SP Mini Standard diffusion test for the detection of antibiotics and sulpha residues in milk	ASM 050

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Page 3 of 3

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Field Manager