

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:-

SOUTHERN AFRICAN GRAIN LABORATORY NPC

Co. Reg. No.: 1997/018518/08

Facility Accreditation Number: T0116

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 PHYSICAL 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 Chief Executive Officer

Effective Date: 11 November 2014
Certificate Expires 31 October 2019

Facility Number: T0116

ANNEXURE A

SCHEDULE OF ACCREDITATION

Facility Number: T0116

| Permanent Address of Laboratory: | | Technical Signatories: | | |
|--|----|--|--|--|
| South African Grain Laboratory (NPC) Agri-Hub Office Park - Grain Building | Ms | J Nortje (All Methods excl. In-house method 029) | | |
| 477 Witherite Road | Ms | M Bothma (All Chemical Methods) | | |
| The Willows | Ms | M Hammes (All Chemical Methods) | | |
| Pretoria 0040 | Ms | A de Jager (Nutrients & Contaminants Methods) | | |
| | Ms | W Louw (In-house Methods 001, 002, 003, 010 & 026) | | |
| | Ms | D Moleke (Rheological Methods) | | |
| | Ms | l Terblanche (Rheological Methods) | | |
| | Ms | H Meyer (All Chemical, Nutrients and Contaminants & Grading Methods) | | |
| | Ms | J K <mark>ruger (All Chemi</mark> cal Methods) | | |
| | Ms | P Modiba (All Chemical Methods) | | |
| | Ms | M Motlanthe (In-house Methods 001, 003 & 026) | | |
| | Mr | B van Der Linde (Grading) | | |
| | Ms | M Ramare (All Chemical Methods Excl. In- House Method 012 and SOP MC23) | | |
| | Ms | Z Skhosana (In-house Method 026) | | |
| | Ms | T de Beer (Rheological Methods) | | |

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Nominated Representative:

Ms PM Modiba

Issue No.: 28

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| Material or Products Tested | Type of Tests / Properties Measured, Range of Measurement | Standard Specifications, Techniques / Equipment Used |
|--|---|---|
| CHEMICAL | | |
| Ground Barley | Moisture (Oven Method) | Analytical EBC Method 3.2, latest Edition (2 hour; 130 ⁰ C) |
| Cereal and cereal products specifically-wheat, rice, (hulled paddy), barley, millet, rye, and oats as grain, semolina and flour | Moisture (Oven Method) | ICC Std No.110/1, Latest Edition (90 min; 130°C) (2 hour; 130°C) |
| Flour, semolina, bread, all kind of grains and cereal products and food products (except those that | Moisture (Oven Method) | AACCI 44-15.02, Latest Edition (1 hour; 130°C) |

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are sugar coated) (72 hour; 103°C)

Maize Grits Moisture (Oven Method) Analytical EBC Method 6.2.2,

latest edition (4 hours, 130°C)

Animal feed, Plant tissue and

Sunflower (Milled)

Moisture (Oven Method)

AgriLASA 2.1, Latest Edition (5

hours, 105⁰C)

All flours, cereal grains, oilseeds

and animal feeds

Nitrogen and protein (Combustion

method - Dumas)

AACCI 46-30.01, Latest Edition

Cereal based food stuff Dietary fibres (Total)

In-house method 012

Food stuff and feeds Carbohydrates (by difference)

(calculation)

Energy value (calculation) Total digestible nutritional value

(calculation)

SOP MC 23

Food Stuff and feeds

Determination of Ash

In-house method 011

Wheat Kernels

Moisture (Oven Method)

Government Gazette Wheat Regulation, Latest Edition

(72 hour, 103°C)

Flours of grains e.g. barley, oats, triticale, maize, rye, sorghum and wheat; oilseeds like soybeans and sunflower, feeds and mixed feeds and foodstuffs

Crude fat (Ether extraction by

In-house method 024

Meal and flour of wheat, rye, barley, other grains, starch containing and malted products Falling number

ICC Std 107/1, Latest Edition

NUTRIENTS AND CONTAMINANTS

Vitamin fortified food and feed products and fortification mixes grain based

Vitamin A as all trans Retinol (Saponification) (HPLC)

In-house method 001

Thiamine Mononitrate (HPLC)

Riboflavin (HPLC) Nicotinamide (HPLC)

Pyridoxine Hydrochloride (HPLC)

In-house method 002

Folic Acid (HPLC)

In-house method 003

Grain based food and feed products (fortified and unfortified) Total Iron (Fe) and fortification mixes

Total Sodium (Na) Total Zinc (Zn)

In-house method 010

Yeast and Bread

Vitamin D₂ (HPLC)

In-House method 029

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Food and feed

Multi-Mycotoxin:

In-house method 026

-Aflatoxin G_1 , B_1 , G_2 , B_2 and total

-Deoxynivalenol (DON), 15-ADON

-Fumonisin B_1 , B_2 , B_3 -Ochratoxin A -T2, HT-2

- Zearalenone

GRADING

Maize Defective kernels (White maize/

yellow maize)

Government Gazette Maize

Regulation, Latest Edition

Cereal as grains (Wheat, barley,

rye and oats)

Hectolitre mass (Kern222)

ISO 7971-3, Latest edition

Wheat Screenings Government Gazette Wheat

Grading Regulation, Latest

Edition

RHEOLOGICAL

Wheat flour Alveograph (Rheological properties)

ICC Std.121, Latest Edition

Flours Farinograph (Rheological properties)

AACCI 54.02, Latest Edition (Rheological behaviour of flour Farinograph: Constant Flour

Weight procedure)

and whole wheat flour)

Hard, soft and durum wheat (flour Mixograph (Rheological properties)

Industry accepted method 020 (Based on AACCI 54-40.02,

Latest Edition Mixograph

Method)

Original Date of Accreditation: 01 November 1999

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

Accreditation Manager