



**UGANDA NATIONAL BUREAU OF STANDARDS**

**CERTIFICATE OF LABORATORY RECOGNITION**

**Certificate No: UNBS/LRS/0006**

This certificate is valid as per the scope stated in the accompanying schedule of recognition, Annex "A" which is an integral part of the present certificate bearing the above recognition number for

**CHEMISTRY AND MICROBIOLOGY TESTING**

In accordance with the recognised International Standard **ISO/IEC 17025:2017**

Being supplied to

**ST. MICHAEL FOOD LAB AND CONSULTANCY  
LIMITED**

Plot 68B, Prince Charles Drive, Kololo, Kampala, Uganda.

The recognition demonstrates technical competence and the operation of a laboratory quality management system to perform the tests as described in the Annex. While this certificate remains valid, the recognised laboratory above is authorised to use the relevant UNBS recognition number to issue facility reports and /or certificates.

**Recognition Decision Date: 2021-10-18**

**Date of original issue: 2017-01-11**

**Certificate Issue No:03**

**Effective Date: 2021-10-18**

**Expiry date: 2024-01-10**

**Certificate Issue date: 2021-10-18**

**Executive Director  
UGANDA NATIONAL BUREAU OF STANDARDS**



# ANNEX A

## SCHEDULE OF RECOGNITION – TESTING LABORATORIES

Facility Number	UNBS/LRS/0006	S/N	Technical Signatories	Method
St. Micheals Food Lab and Consultancy Ltd  P. O. Box 27758 Kampala. Uganda Plot 68B Prince Charles Drive Kololo.		1.	Michelle Kyeyune	Microbiology testing scope
		2.	Okitoi Benon	Chemistry and Microbiology testing scope
		3.	Atwine Ambrose	Chemistry testing scope
Material or products tested	Type of tests/property measured, Range of Measurement	Standard specifications, Techniques/Equipment used		
TESTING FIELD - MICROBIOLOGY				
a) packaged drinking water b) potable water c) natural mineral water d) ices (frozen water)	Escherichia coli	ISO 9308-1:2014		
	Salmonella Detection	ISO 19250:2010		
	Staphylococcus aureus	ISO 6888-1:2021		
	Streptococcus faecalis	ISO 7899-2:2000		
	Pseudomonas aeruginosa	ISO 16266:2006		
	Total coliforms	ISO 9308-1:2014		
	Total Viable Count at 22 and 37 degrees	ISO 6222:1999		
a) Matooke Flour	Total plate Count	ISO 4833:2013		
b) Maize flour	Escherichia coli	ISO 16649-2:2001		
c) Wheat flour				
d) Moringa powder	Total Coliforms	ISO 4832:2006		
e) Cereal beverages	Staphylococcus aureus	ISO 6888-1:2021		
f) Dairy based beverages	Yeasts and moulds count	ISO 21527-1/2:2008		
g) Non carbonated soft drinks	Salmonella detection	ISO 6579-1:2017		
h) UHT milk	Enterobacteriaceae	ISO 21528-2:2017		
i) Flavoured UHT milk				

j) Pasteurised milk k) Milk powder l) Yoghurt m) Tea (Black tea and Herbal Tea) n) Roasted nuts (Ground and Cashew nuts) o) Food grain snacks p) Potato crisps		
<b>TESTING FIELD - CHEMISTRY</b>		
a) packaged drinking water	Total dissolved solids (TDS)	ASTM D 5907
b) potable water		
c) natural mineral water	Odour	US EAS 153:2014
d) ices (frozen water)	Determination of Calcium in water	AWWA/APHA:3500-CaD
	Determination of total hardness in water(as CaCO <sub>3</sub> )	AWWA/APHA:2340C
	Determination of Chlorides in water	AWWA/APHA:4500-C <sup>-</sup> (argentometric method)
	Determination of Residual Free Chlorine in water	AWWA/APHA:4500-Cl <sup>-</sup> (iodometric method)
	Determination of pH in water	AOAC 973.41
	Determination of electrical conductivity in water	AOAC 973.40
	Detection of suspended matter in water	US EAS 153:2014
	Determination of alkalinity in water	AWWA/APHA: 2320
a) UHT milk	Corrected Lactometer Reading(density)	(US EAS 67)- Lactoscan/Calibrated Lactometer, thermometer(0-100°C), water bath, measuring cylinders
b) pasteurized milk		
c) flavored UHT milk	Milk Fat content.	(ISO 2446)- Lactoscan/Gerber Centrifuge (1000-1200 rpm), milk butyrometers, water bath(60°C), 90% sulphuric acid, concentrated amyl alcohol, rubber stoppers.


	Total solids.	ISO 6731
	pH.	US EAS 33:2019 Annex A-Potentiometric
	Titrateable acidity as Lactic acid:	EAS 27:2019 (Annex B) EAS 33:2019 (Annex B)
	Solids Non Fat (SNF):	ISO 6731
	pH variation ( <i>for only pasteurized milk</i> )	US EAS 27:2019 Annex A US 1597:2017 Annex A Potentiometric test
Cream	Fat content	(ISO 2446)- Gerber Centrifuge
Milk Powder	Moisture Content	(EAS 81) ISO 5537
	Milk fat	(ISO 2446) - Gerber Centrifuge
	Titrateable acidity as Lactic acid	ISO 6091
Ice Cream	Milk fat content	(ISO 2446)-Gerber Centrifuge (1000-1200 rpm), milk butyrometers, water bath(60°C),90% sulphuric acid, concentrated amyl alcohol, rubber stoppers.
a) Fruit- and vegetable-based Fruit Juices  b) Fruit Juice Concentrates  c) Non-carbonated soft drinks	Brix.	ISO 2173-Calibrated Refractometer, water bath (20°C),deionised water sufficient light

Non-alcoholic Beverages	Determination of ethanol content in non-alcoholic beverages.	(ISO 2448) Titrimetric method-sulphuric acid, calcium hydroxide, potassium dichromate solution, potassium permanganate, ammonium iron(ii)sulphate solution, titration apparatus
Salted butter	Determination of salt content.	(ISO 1738:2004) Titrimetric method- 5% (w/v) aqueous potassium chromate solution, standard silver nitrate solution (0.1N), sodium hydroxide, calcium carbonate, conical flask, pipettes.
Ghee	Determination of the peroxide value.	(AOAC 965.33) Titrimetric method-absolute diethyl ether, absolute ethanol, phenolphthalein indicator, KOH, titration apparatus.
	Determination of the free fatty acids.	(ISO 1740/IDF 6)- Potentiometric titration: Rectified spirit 95%(v/v) phenolphthalein indicator, sodium hydroxide(0.1N), titration apparatus
a) Maize flour b) Whole maize meal c) Wheat flour	Determination of the peroxide value.	(AOAC 965.33) Titrimetric method-absolute diethyl ether, absolute ethanol, phenolphthalein indicator, KOH, titration apparatus.
	Determination of the free fatty acids.	ISO 1740/IDF 6)- Potentiometric titration: Rectified spirit 95%(v/v) phenolphthalein indicator, sodium hydroxide(0.1N), titration apparatus
	Total ash content.	(AOAC 923.03) ISO 2171-Gravimetric method
	Acid insoluble ash.	(AOAC 923.03, (23.1.05)) ISO 5985-Gravimetric method
	Moisture content.	EAS 901 AOAC (1985) 24.002-Gravimetric method.
a) Ground coffee b) Roasted nuts (Ground and cashew nuts) c) Moringa powder	Moisture content.	Gravimetric method– Hot air oven, dessicator with silica gel, analytical balance (0.001g), aluminum vials with lids.
	Acid insoluble ash.	ISO 1026 US EAS 105:1999 Annex E AOAC methods 1:1990 -Gravimetric method
	Total ash content.	ISO 936 US EAS 105:1999 Annex F -Gravimetric method
a) Vinegar b) Egg white c) Yoghurt	pH	(AOAC 981.12)-Potentiometric
HAND SANITIZER (alcohol and non-alcohol based sanitizers)	Determination of pH.	US 1625:2015-Annex B; Potentiometric
	Determination of alcohol content.	US EAS 104

COSMETICS (oil- and water- emulsion Skin creams and lotions)	Total fatty matter content.	(EAS 786:2013- Annex C)- Dilute Sulphuric acid (4M), acetone and diethyl ether, methyl orange indicator solution, anhydrous sodium sulphate, dessicator with silica gel, separating funnel.
	pH value.	(EAS 786:2013- Annex B)- Electrical conductivity meter, PH meter, beaker (100ml), buffer solutions, deionized water, water bath, filter paper and funnel, rectified alcohol
	Thermal stability.	(EAS 786:2013- Annex A) Hot air oven at 37±1

ISSUED BY

UGANDA NATIONAL BUREAU OF STANDARDS

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MANAGER CERTIFICATION DEPARTMENT