Issue date: 23 October 2025 Valid until: 24 May 2030



**NO: SAMM 463** 

(Issue 2, 23 October 2025 replacement of SAMM 463 dated 11 June 2025)

Page: 1 of 8

LABORATORY LOCATION/	KHTP BIO ANALYTICAL LABORATORY SDN. BHD.		
CENTRAL OFFICE:	GROUND FLOOR, TECHNO CENTRE		
画数級画	KULIM HI-TECH PARK		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	09000 KULIM		
	KEDAH		
	MALAYSIA		
ACCREDITED SINCE:	24 MAY 2010		
FIELD(S) OF TESTING:	CHEMICAL, MICROBIOLOGY		
SITE:			
1. SITE LABORATORY:	SITE 1		
FIELD(S) OF TESTING:	CHEMICAL		

This laboratory has demonstrated its technical competence to operate in accordance with MS ISO/IEC 17025:2017 (ISO/IEC 17025:2017).

This laboratory's fulfillment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001 (see Joint ISO-ILAC-IAF Communiqué dated April 2017).

CENTRAL LOCATION:	KHTP BIO ANALYTICAL LABORATORY SDN. BHD.	
	GROUND FLOOR, TECHNO CENTRE, KULIM HI-TECH PARK,	
	09000 KULIM, KEDAH	
FIELD(S) OF TESTING:	CHEMICAL, MICROBIOLOGICAL	

#### SCOPE OF TESTING: CHEMICAL

Material / Product Tested	Type of Test / Properties Measured / Range of Measurement	Standard Test Methods / Equipment / Techniques
Agricultural Products and Materials Animal Feed	Moisture	In-House Method LTM 7.2.1A-009 based on AOAC Official Method 931.04, 2005
	Ash	In-House Method LTM 7.2.1A- 010 based on AOAC Official Method 923.03, 2005
	Crude fat	AOAC Official Method 2003.06, 2005
	Crude protein	AOAC Official Method 2001.11, 2005
	Carbohydrates	In-House Method LTM 7.2.1A-013 based on Methods of Analysis for Nutrition Labeling, AOAC International 1993
	Calories/Energy	In-House Method LTM 7.2.1A-015 based on Methods of Analysis for Nutrition Labeling, AOAC International 1993

Issue date: 23 October 2025 Valid until: 24 May 2030



**NO: SAMM 463** 

(Issue 2, 23 October 2025 replacement of SAMM 463 dated 11 June 2025)

Page: 2 of 8

Material / Product Tested	Type of Test / Properties Measured / Range of Measurement	Standard Test Methods / Equipment / Techniques
Industrial Hygiene	S-Phenylmercapturic Acid (SPMA)	In-House Method LTM 7.2.1A-106 using LC-MS/MS
Biological Specimens	Toluene	In-House Method LTM 7.2.1A-102
Urine		using HS-GC-FID
Drugs and Pharmaceuticals	Cadmium, Lead, Arsenic	In-house Method LTM 7.2.1A-017 using Microwave digestion / GFAAS
Herbs and Herbal Products		
Tablets		
Capsules		
Liquid Cream		
Balm		
Raw materials		
Foods	Moisture	In-House Method LTM 7.2.1A-009
Dairy products		based on AOAC Official Method 931.04, 2005
Fish and fish products	Ash	In-House Method LTM 7.2.1A-010 based on AOAC Official Method
Flour and confectionary	Crude fat	923.03, 2005 In-House Method LTM 7.2.1A-012
Honey and honey products	Orduc lat	based on AOAC Official Method 2003.06, 2005
Infant food	Crude protein	In-House Method LTM 7.2.1A-011 based on AOAC Official Method
Meat, poultry and derived		2001.11, 2005
Products  Non-alcoholic beverages	Carbohydrates	In-House Method LTM 7.2.1A-013 based on Methods of Analysis for Nutrition Labeling, AOAC International 1993
Nuts, fruits, vegetables and derived products	Calories/Energy	In-House Method LTM 7.2.1A-015 based on Methods of Analysis for
Sauces, herbs, spices and condiments		Nutrition Labeling, AOAC International 1993
Sugar and sugar products		
Foods	Alcohol	In-House Method LTM 7.2.1A-022 using GC-FID
Beverages And Fruit Juices		3
Foods	Benzoic Acid Sorbic Acid	In-House Method LTM 7.2.1A-031 using HPLC
Beverages and Fruit Products	Sugar	ASEAN Manual of Food Analysis, 2011

Issue date: 23 October 2025 Valid until: 24 May 2030



**NO: SAMM 463** 

(Issue 2, 23 October 2025 replacement of SAMM 463 dated 11 June 2025)

Page: 3 of 8

Material / Product Tested	Type of Test / Properties Measured / Range of	Standard Test Methods / Equipment / Techniques
Foods	Measurement Total Fat	In-House Method LTM 7.2.1A-096
loous	Total Fat	based on AOAC 963.15, 2005
Dairy products		, , , , , , , , , , , , , , , , , , , ,
Fish and fish products		
Honey and honey products		
Infant food		
Meat, poultry and derived Products		
Non-alcoholic beverages		
Nuts, fruits, vegetables and derived products		
Industrial Hygiene	Aluminium	In-House Method LTM 7.2.1A-040
Biological Specimen	Arsenic	using ICP-MS
Urine	Antimony	
Blood	Cadmium	
	Chromium	
	Cobalt	
	Copper	
	Lead	
	Manganese	
	Mercury	
	Nickel	
	Zinc	
Industrial Hygiene	Lead (Pb)	In-House Method LTM 7.2.1A-024 using GF-AAS
Blood		3.7.16
Industrial Hygiene	2, 5 Hexanedione	In-House Method LTM 7.2.1A-020
Urine	Hippuric Acid	using GC-FID In-House Method LTM 7.2.1A-021 using HPLC-PDA
	Creatinine	In-House Method LTM 7.2.1A-028 using UV-VIS
	Phenol	In-House Method LTM 7.2.1A-056 using HPLC-PDA
	Methyl Hippuric Acid	In-House Method LTM 7.2.1A-078 using HPLC-PDA

Issue date: 23 October 2025 Valid until: 24 May 2030



**NO: SAMM 463** 

(Issue 2, 23 October 2025 replacement of SAMM 463 dated 11 June 2025)

Page: 4 of 8

Material / Product Tested	Type of Test / Properties Measured / Range of Measurement	Standard Test Methods / Equipment / Techniques
Water	pH	APHA 4500-H <sup>+</sup> B
Mineral Water	Conductivity	APHA 2510 B
Potable Water	Total Suspended Solids	APHA 2540 D
Surface Water	Chemical Oxygen Demand	APHA 5220 C
Industrial Effluent	Biological Oxygen Demand	APHA 5210 B & APHA 4500 -O,G
	Ammoniacal Nitrogen	APHA 4500-NH₃ B, C
Water	Oil and Grease	APHA 5520B
Surface Water		
Industrial Effluent		
Water	Cd, As, Pb, Cu, Mn, Ni, Sn, Zn, B,	APHA 3120 B
Industrial Effluent	Fe, Ag, Al, Se, Ba, Cr	
Surface Water		
Ground Water		
Water	Fluoride	APHA 4500-F C
Industrial Effluent		APHA 4500-F D
	Colour (ADMI)	APHA 2120 F
	Hexavalent Chromium, Cr <sup>6+</sup>	APHA 3500-Cr B
	Sulphide	APHA 4500-S <sup>2-</sup> C & F
	Phenol	APHA 5530 B & D
	Cyanide	APHA 4500-CN C & Method 8027 Hach Pyridine-Pyrazalone
	Mercury	APHA 3112 B
	Formaldehyde	Method 8110 Hach MBTH
		In-House Method LTM 7.2.1A-109 based on APHA 6252 B
	Trivalent Chromium, Cr <sup>3+</sup>	In-House Method LTM 7.2.1A-108 based on APHA 3120 B & APHA 3500-Cr B

Issue date: 23 October 2025 Valid until: 24 May 2030



**NO: SAMM 463** 

(Issue 2, 23 October 2025 replacement of SAMM 463 dated 11 June 2025)

Page: 5 of 8

Material / Product Tested	Type of Test / Properties  Measured / Range of  Measurement	Standard Test Methods / Equipment / Techniques
Medical Devices	Ethylene Oxide Sterilization Residues	In-House Method LTM 7.2.1A- 059A based on ISO 10993-7, 2008 and AMD 1 2019-12: Applicability
		of allowable limits for neonates and infants
	Ethylene Chlorohydrin Sterilization Residues	In-House Method LTM 7.2.1A- 060A based on ISO 10993-7, 2008 and AMD 1 2019-12: Applicability of allowable limits for neonates and infants
	Ethylene Oxide and Ethylene Chlorohydrin Residues	In-House Method LTM 7.2.1A-077 based on ISO 10993-7, 2008 and AMD 1 2019-12

#### Note:

AOAC – Association of Official Analytical Chemist, 18th Edition, 2005

APHA – American Public Health Association, 21st Edition, 2005

Issue date: 23 October 2025 Valid until: 24 May 2030



**NO: SAMM 463** 

(Issue 2, 23 October 2025 replacement of SAMM 463 dated 11 June 2025)

Page: 6 of 8

### SCOPE OF TESTING: MICROBIOLOGY

Material / Product Tested	Type of Test / Properties Measured / Range of Measurement	Standard Test Methods / Equipment / Techniques
Medical Devices	Sterility	USP 41 Microbiological Test <71> Sterility Test
Medical Devices	Bioburden	ISO 11737-1, 2018
Medical Solutions - Parenteral Preparation - Opthalmic - Non- Injectable preparation	Bacteriostasis and Fungistasis	A) In-house method based on USP 41 Microbiological Test <71> Sterility Test
		B) ISO 11737-2, 2019
Medical Devices Biological Indicator	Sterility	In-House Method LTM 7.2.1A-062 on USP 41 Microbiological Test <71> Sterility Test
Spore Strip	Population Count	In-House Method LTM 7.2.1A-063A based on USP 41 Microbiological Test <55> and ISO 11138 :2017 Part 1 and Part 2
		In-House Method LTM 7.2.1A-063B based on 3M Technical Bulletin-05- 000003
Medical Devices	Sterility	ISO 11737 Part 2
Medical Devices		
Medical Solutions - Parenteral Preparation - Opthalmic - Non- Injectable Preparation		
Microbiological tests on	Total Aerobic Microbial Count	British Pharmacopoeia 2014
pharmaceutical and cosmetics	Total Yeast & Mould Count	Appendix XVI B
Traditional Herbal Products	Bile Tolerant Gram Negative Bacteria	Pour Plate Technique
Cosmetic	- Present/Absent Semi Quantitative	
Toiletries	Escherichia coli - Present/Absent Semi Quantitative Salmonella	
	Pseudomonas aeruginosa	
	Staphylococcus aureus	

Issue date: 23 October 2025 Valid until: 24 May 2030



**NO: SAMM 463** 

(Issue 2, 23 October 2025 replacement of SAMM 463 dated 11 June 2025)

Page: 7 of 8

Material / Product Tested	Type of Test / Properties Measured / Range of Measurement	Standard Test Methods / Equipment / Techniques
Medical Devices	Bacterial Endotoxins Test by Gel Clot Method	USP 41 Biological Test and Assay <85> Bacterial Endotoxins Test
Medical Solutions		
- Medical Injection Liquid		
- Dialysis Solution		
- Water for Injection (WFI)		
Water		
- Reverse Osmosis Water		
- Purified Water		

Issue date: 23 October 2025 Valid until: 24 May 2030



**NO: SAMM 463** 

(Issue 2, 23 October 2025 replacement of SAMM 463 dated 11 June 2025)

Page: 8 of 8

SITE LOCATION (HQ)	SITE 1
FIELD(S) OF TESTING:	CHEMICAL

### **SCOPE OF TESTING: CHEMICAL**

Material / Product Tested	Type of Test / Properties Measured / Range of Measurement	Standard Test Methods / Equipment / Techniques
Water	pH and Temperature (in-situ)	APHA 2550 B
Industrial Effluent	Free Chlorine (in-situ)	APHA 4500-CI G