

NO: SAMM 519 (Issue 3, 30 November 2023 replacement of SAMM 519 dated 18 July 2023)

Page: 1 of 6

LABORATORY LOCATION: (PERMANENT LABORATORY)



SANICHEM RESOURCES SDN. BHD. NO. 7 & 7A, JALAN TIMUR 6/1A MERCATO@ENSTEK 71760 BANDAR ENSTEK NEGERI SEMBILAN MALAYSIA

FIELDS OF TESTING:

CHEMICAL & MICROBIOLOGY

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).

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Sterilized medical devices	Ethylene oxide sterilization residuals a) Ethylene Oxide b) Ethylene Chlorohydrin c) Ethylene Glycol	In-house Method [TM-001] based on ISO 10993-7 (2008) : Amd.1 (2019)
Aqueous solution	Ethylene Oxide	In-house Method [TM-002] based on ISO 10993-7 (2008) : Amd.1 (2019)
	Ethylene Chlorohydrin	In-house Method [TM-003] based on ISO 10993-7 (2008) : Amd.1 (2019)
	Ethylene Glycol	
Ethylene oxide gas	Relative % purity of gas	In-house Method [TM-005] based on US-EPA Method 8000C: Determinative Chromatographic Separations (2003)



NO: SAMM 519

(Issue 3, 30 November 2023 replacement of SAMM 519 dated 18 July 2023)

Page: 2 of 6

SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Water Wastewater, Potable Water,	Temperature (on-site & in- house)	APHA 2550 B (2017)
Ground water, Surface water	pH (on-site & in-house)	APHA 4500-H+ (2017)
	Conductivity	APHA 2510 B (2017)
Foods		
Fermented food products Sushi Tapai Suspected food products Drinks	Ethanol content	In-house Method [TM-008] based on papers in Journal of Chromatographic Science, vol. 47, pg. 272-278 (2009) and Amer. J.
Fermented drinks Energy and health drinks Alcoholic beverages Carbonated drinks Canned and bottled drinks		Enol. Viticult., vol 25 (4), pg 202-207 (1974)

Signatories:

- 1. Nor Diyana bt. Md. Sani
- 2. Nurul Nadiah binti Rosly

Notes:

ISO – International Organization for Standardization US EPA – United States Environmental Protection Agency APHA – American Public Health Association TM – Test Method

IKM No.: M/4927/8110/18 IKM No.: L/3044/9037/21



NO: SAMM 519

(Issue 3, 30 November 2023 replacement of SAMM 519 dated 18 July 2023)

Page: 3 of 6

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques	
Medical Devices	Sterility	In-house Method [TM-500] Sterility Test-Direct Immersion based on ISO 11737-2:2019	
	Sterinty	USP 43-NF 38 Microbiological Test: Sterility Test-Direct Inoculation, 2020	
	Bioburden	In-house Method [TM-505] based on ISO 11737-1:2018 + USP <61> and USP <62>	
	Bacteriostasis and Fungistasis	In-house Method [TM-504] based on ISO 11737-2:2019	
		USP 43-NF 38 Microbiological Test / <71> Sterility test, 2019	
	Endotoxin (Kinetic Turbidimetric Method)	In-house Method [TM-508] based on USP Chapter <85> Bacterial Endotoxins Test and USP Chapter <161> Transfusion and Infusion Assemblies and Similar Medical Devices, 2012	
Biological Indicator	Sterility	In-house Method [TM-501] based on ISO 11138-1:2017	
		In-house method [TM-506] based on ETIGAM Technical Data Sheet :2015	
	Population Counts	In-house method [TM-507] based on 3M Technical Bulletin-05- 000003:2008	
Foods: Meat and meat products Poultry and poultry products Edible fats and oils	Aerobic Plate Count	FDA-BAM: Chapter 3 - Aerobic Plate Count	
Edible fats and oils Dairy products Confectionary Animal Feeds Beverages Herbs and spices Cereal Products Others: Edible bird's nest	Coliform and Escherichia coli	FDA-BAM: Chapter 4 - Enumeration of E. coli and Coliform Bacteria	



NO: SAMM 519

(Issue 3, 30 November 2023 replacement of SAMM 519 dated 18 July 2023)

Page: 4 of 6

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Environmental sample: Air (Total plate count, aerobic bacteria and yeast & mold)	Active sampling	In-house method [TM-800] based on ISO 14698-1:2003 and USP<1116>
	Passive sampling	In-house method [TM-801] based on ISO 14698-1:2003 and USP<1116>
Surface (Total plate count, aerobic	Contact plate	In-house method [TM-804] based on ISO 14698-1:2003 and USP<1116>
mold)	Hand Swab	In-house method [TM-802] based on Public Health England. Detection and Enumeration of Bacteria in Swabs and other Environmental Samples. Microbiology Services. Food, Water & Environmental Microbiology Standard Method E1; Version 2.(2014)
	Sponge Swab	In-house method [TM-803] based on ISO 14698-1:2003
Water: <u>Non-Potable</u> Ground Water Surface Water Industrial Effluent Swimming Pool Water Waste Water <u>Potable</u> Tap Water Drinking water Mineral Water	Total Plate Count	APHA 9215 B, 23 rd Edition: 2017 (Pour Plate Method) APHA 9215 D, 23 rd Edition: 2017 (Membrane Filtration Technique)
Water: <u>Non-Potable</u> Ground Water Surface Water <u>Potable</u> Tap Water Drinking water Mineral Water	Escherichia coli	MS ISO 9308-1:2011 (Membrane Filtration Technique)



NO: SAMM 519

(Issue 3, 30 November 2023 replacement of SAMM 519 dated 18 July 2023)

Page: 5 of 6

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
		In-house method [TM-508] based on
Water		USP Chapter <85> Bacterial
Water for injection, potable	Endotoxin	Endotoxins Test and USP Chapter
water, distilled water	(Kinetic Turbidimetric Method)	<161> Transfusion and Infusion
		Assemblies and Similar Medical
		Devices
		In-house method [TM-703] based on
Water	Coliform, Fecal Coliform &	APHA 9222 B.G.H.D 23rd
Potable water, Ground	Escherichia coli	Edition:2017 (Membrane Filtration
water, Surface water		Technique)
		In-house method [TM-706] based on
	Pseudomonas aeruginosa	APHA 9213 E, 23 rd Edition:2017
		(Membrane Filtration Technique)
		In-house method [TM-707] based on
	Fecal Enterococcus /	APHA 9230 C, 23 rd Edition:2017
	Streptococcus	(Membrane Filtration Technique)
		In-house method [TM-710] based on
	Total Coliform & Escherichia coli	AOAC Official Methods 991.41
		(Petrifilm Technique)
Bacteria Identification Bacteria and Yeast		USP Chapter <1113>, Remel RapID
	Bacteria and Yeast Identification	panels and Biomeriux API ID strips
		(Miniaturized Biochemical Tests)



NO: SAMM 519

(Issue 3, 30 November 2023 replacement of SAMM 519 dated 18 July 2023)

Page: 6 of 6

SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Potable Drinking water Mineral Water Tap Water	Total Coliform	MS ISO 9308-1:2011
Water: <u>Non-Potable</u> Ground Water Surface Water Industrial Effluent Swimming Pool Water Waste Water	Total Coliform Count Escherichia coli Fecal coliform	In-house method [TM-701] based on APHA 9221 B,C,E,F, 23 rd Edition: 2017 (MPN method)

Signatories:

1. Muhammad Ameer Danish bin Mohd Ikram

2. Nur Sufia binti Md Sani

Notes:

ISO – International Organization for Standardization USP – United States Pharmacopeia NF – National Formulary APHA – American Public Health Association MS ISO – Management Standards international Organization for Standardization TM – Test Method MPN – Most Probable Number