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LABORATORY LOCATION: SANICHEM RESOURCES SDN. BHD. (PERMANENT LABORATORY) 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)
Aqueous solution	Ethylene Oxide	In-house Method [TM-002] based on ISO 10993-7 (2008)
	Ethylene Chlorohydrin	In-house Method [TM-003] based on
	Ethylene Glycol	ISO 10993-7 (2008)
Ethylene oxide gas	Relative % purity of gas	In-house Method [TM-005] based on US-EPA Method 8000C: Determinative Chromatographic Separations
Non-halogenated organics Residual solvents Hydrocarbons containing 5- 12 carbons	Relative % purity of solvent	In-house Method [TM-004] based on US-EPA Method 8015D, 8000C and USP Method <467>

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SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Water Ground water Surface water Potable and domestic Others: Waste water	рН	APHA 4500-H+
	Total Dissolved Solid	APHA 2540 C
	Total Suspended Solid	APHA 2540 D
	Hardness	APHA 2340 B
	Fe, Cu, Cd, Si, Pb	APHA 3111 B
	Hg	APHA 3112 B
	As	APHA 3114 C
	Са	i) APHA 3111B ii) ASTM D511
	Mg	i) APHA 3111B ii) ASTM D511
Foods Fermented food products Sushi Tapai Suspected food products Drinks Fermented drinks Energy and health drinks Alcoholic beverages Carbonated drinks Canned and bottled 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. Enol. Viticult., vol 25 (4), pg 202-207 (1974)
Foods Food paste and puree: tomato and chili sauces, ketchup, herbal paste and extract, jam and spreadable fats and other water soluble sauces Dried food: dried fruits and dried noodles Drinks Alcoholic beverages Non-alcoholic beverages	Benzoic and Sorbic acids Sodium Benzoate Potassium Sorbate	In-house Method [TM-009] based on: i) AOAC 994.11 Nour et al, Annals. Food Science and Technology, 10 (2009), pg. 157-162
Foods Flour and confectionary Spices Others: edible bird's nest	Moisture	In-house Method [TM-010] based on MS 1435: 1998 Method of Sampling and Tests for Biscuits

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Materials / Products tested	Type of tests / Properties measured / Range of measurement	Standard test methods / Equipment / Techniques
Waste Water, Industrial Effluent	Colour (ADMI)	In-house method, TM-011 based on Macherey-Nagel Colour test
	Aluminium	In-house method, TM-012 based on Macherey-Nagel test 102
	Cr (III), Cr (VI), Cr (Total)	In-house Method, TM-013 & TM-014 based on Macherey-Nagel test 125
	Iron	In-house method, TM-015 based on Macherey-Nagel test 136
	Zinc	In-house method, TM-016 based on Macherey-Nagel test 195
	Free Chlorine	In-house method, TM-017 based on Macherey-Nagel test 720
	Cyanide	In-house method, TM-018 based on Macherey-Nagel test 130
	Fluoride	In-house method, TM-019 based on Macherey-Nagel test 142
	Ammonia as N	In-house method, TM-020 based on Macherey-Nagel test 105
	Sulphide	In-house method, TM-021 based on Macherey-Nagel test 188
	Formaldehyde	In-house method, TM-022 based on Marcherey-Nagel test 046
	Tin	In-house method, TM-023 based on Macherey-Nagel test 097
	Manganese	In-house method, TM-024 based on Macherey-Nagel test 160
	Nickel	In-house method, TM-025 based on Macherey-Nagel test 162
	Phenol	In-house method, TM-026 based on Macherey-Nagel test 175
	BOD5 at 20° C	In-house method, TM-027 based on Macherey-Nagel test 822
	Turbidity	In-house method, TM-028 based on Macherey-Nagel test 906
	Oil and Grease	APHA 5520 B
	COD (20-200 mg/L)	APHA 5220 D
	Temperature	APHA 2550 B

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Signatory:

Dr. Md. Sani Ibrahim
 Nor Diyana bt. Md. Sani
 Abdul Muiz b. Abdul Naim
 IKM No.: A/1427/2592/95
 IKM No.: M/4927/8110/18
 IKM No.: L/2542/7574/16

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SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Microbiological tests on foods: Meat and meat products Poultry and poultry products Edible fats and oils Dairy products Confectionary Animal Feeds Beverages Herbs and spices Cereal Products Others: Edible bird's nest	Aerobic Plate Count	FDA-BAM: Chapter 3 - Aerobic Plate Count
	Coliform and Escherichia coli	FDA-BAM: Chapter 4 - Enumeration of E. coli and Coliform Bacteria
Medical Devices	Sterility	In-house Method [TM-500] Sterility Test-Direct Immersion based on ISO 11737-2:2019
		USP 43-NF 38 Microbiological Test: <71> Sterility Test-Direct Inoculation
	Bioburden	In-house Method [TM-505] based on ISO 11737-1:2018
	Bacteriostasis and Fungistasis	In-house Method [TM-504] based on ISO 11737-2:2019, Annex A.6
Biological Indicator	Sterility	In-house Method [TM-501] based on ISO 11138-1:2017
	Population Counts	In-house method [TM-506] based on: i) ETIGAM Technical Data Sheet :2015 ii) 3M Technical Bulletin-05-000003 iii) ISO 11138-1:2017
Drinking water Mineral water Potable water	Escherichia coli Coliform	MS ISO 9308-1:2018

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SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Microbiological environmental sample:	Active sampling	In-house method [TM-800] based on ISO 14644-2
Air (Total plate count, aerobic bacteria and yeast & mold)	Passive sampling	In-house method [TM-801] based on ISO 14644-2
Surface (Total plate count, aerobic bacteria and yeast & mold)	Contact plate	In-house method [TM-804] based on ISO 14644-2
	Hand Swab	In-house method [TM-802] based on ISO 14644-2
	Sponge Swab	In-house method [TM-803] 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 4, (2017)
Water Effluents Others: Wastewater	Total Plate Count	APHA 9215 B
	Total Coliform	APHA 9221 B

Signatories:

- 1. Nurul Amirah bt. Mohd Zin
- 2. Syuhada bt. Md. Nor
- 3. Nur Sufia bt. Md. Sani