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NO: SAMM 730

LABORATORY LOCATION/ CENTRAL OFFICE:	Amcen Lab Sdn. Bhd. No. 18, Lorong Talang 9 Seberang Perai Tengah 13600 Pulau Pinang , 13600, PULAU PINANG MALAYSIA
ACCREDITED SINCE :	06 APRIL 2025
FIELD(S) OF TESTING:	CHEMICAL CHEMICAL (INDUSTRIAL HYGIENE) 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).

CENTRAL LOCATION:	Amcen Lab Sdn. Bhd. No. 18, Lorong Talang 9 Seberang Perai Tengah 13600 Pulau Pinang , 13600, Pulau Pinang
FIELD(S) OF TESTING :	CHEMICAL, CHEMICAL, MICROBIOLOGICAL

SCOPE OF TESTING : CHEMICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
(standard A)	Barium Boron	None
(standard B)	Boron Cadmium	None
And Condiments	None	In-house method, WI-TEC-M002,
	Escherichia coli	AOAC Edition 2012
	Staphylococcus aureus	AOAC 2003.07/2003.08/2003.11, 19! Edition 2012
	Enterobacteriaceae Count	AOAC 2003.01,19' Edition 2012
	Salmonella	AOAC 2014.01
	Yeast & Mould	AOAC 2014.05
	Yeast & Mould	Food and Drug Administration, Bacteriological Analytical Manual,

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Benzoic Acid	In-house method, SGS-TM-FOOD-021
	None	None
	Cholesterol	None
And Condiments Dairy Products Non-alcoholic Beverages	Benzoic acid & Sorbic acid	In-house method, WI-TEC-M008, based on AOAC 994.11,19"" Edition 2012
And Derived Products	None	None
And Derived Products Sauces, Herbs, Spices E	Coliform	AOAC Edition 2012
Beverages Sugar And Sugar Products Fruits And	Sulphur dioxide	AOAC 990.28 ,19"' Edition 2012
Beverages Sugar And Sugar Products Nut, Fruits And Vegetables And Derived Products	Total fat	In-house method, based on AOAC 989.05,19" Edition 2012 / AOAC 920.39,19"" Edition 2012
Meat, Poultry And	Crude Protein/Total Nitrogen	In-house method, WI-TEC-M004, based on MS 1194:1999
Boiler Water	None	None
	Total Dissolved Solids	APHA 2540 C, 2017
	Acidity	APHA 2310. B
	Acidity	APHA 2310. B
Chemical	None	None
	None	None
	None	None
	None	None
Chemicals	None	None
Condiments	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	Derivatisation
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
Contact With Foodstuffs	Simulants by Total Immersion	None
	Simulants by Pouch	None
	Food Simulants and Test Media	None
Cosmetics E	Heavy Metals	None
	Heavy Metals (As, Pb, Co, Cr,	In-house Method C/COS/023 based

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Dairy Products	Ash	based on AOAC Edition
	Vitamin A palmitate	In-House Method SOP-0217-1029
	None	Method
	None	By Mojonnier (gravimetric)
	Moisture	In-house Method 0509 based on
	Majonnier Fat	AOAC 932.06, Edition
	None	None
	None	None
	Shigella species	FDA-BAM Chapter 6, 2014
	None	None
	None	None
	None	AOAC, 1993)
	None	None
	Water activity	AOAC 978.18 (2000)
	None	Fluorescence Detection
	Vitamin B5	In-house method LWI-TEC-
	None	None
	Ascorbic Acid	In-house method LWI-TEC-
	Vitamin A (Retinol)	In-house method LWI-TEC-
	None	None
	None	(Pour Plate Technique)
	None	(Detection, MPN & Spread Plate
	Enterobacteriaceae Detection	ISO 21528-1: 2004
	Aerobic Plate Count	3M-„¢ Petrifilm-„¢ Rapid Aerobic
	None	None
Dairy Products Non-alcoholic	None	None
Deionized Water Industrial Effluent	Conductivity	APHA 2510 B, 22" Edition 2012
Derived Products	None	Methods of Analysis for Nutrition
	None	LC/MS/MS
	Nitrofuran Metabolites (AMOZ, AHD, AOZ, SEM)	In House Method Based on Agilent Application Notes: ESI LC/MS/MS
	None	None
	None	None
	None	None
	None	None
	Detection of	MY/STP/365 using real PCR
	Vitamin B3 (Nicotinic acid and	In-house method, SGS-TM-FOOD-
	None	None
	Aflatoxin B2	F028 based on 990.33
	None	None
	None	None
	None	None
	Cholesterol	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Distilled Water E Domestic Water E Drinking Water E Mineral Water E Reverse Osmosis Water E Swimming Pool Water E Cooling Tower Water E	e Fluoride e Chloride Nitrite e Bromide Nitrate e Phosphate e Sulfate	APHA 4110 B (2012)
Drinking Water	None	None
	pH	APHA 4500-H + B, 21% Edition
	Trivalent Chromium	In-House Method SOP-0217-2029
	None	None
	Chloride as Cl	Suppression of Eluent Conductivity
	Conductivity	APHA 2510 B, 21% Edition
	Combined Chlorine as Cl2	APHA 4500-Cl G, 21st Edition 2005
	None	None
	Staphylococcus aureus	AOAC OMA 2003.08
	Chlorite (ClO2)	In House Method 6023, based on
	None	None
	None	None
	Mineral Oil	APHA 5520 F
	Fluoride	APHA C
	None	None
	Heterotrophic Plate Count	APHA 9215 D
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	126, based on Thermo Fisher Application Noted 154
	Phenol	APHA 6420C, 24" Edition
	None	In-house method SGS-TM-ENVI-W-
	Organochlorine Pesticide	APHA 6630B, 24" Edition
	Conductivity	APHA 2510 B
	None	Boiling Cell Method
	None	QIAGEN Mericon? Bacteria Kit
	None	spp. by Gel Electrophoresis
	None	monocytogenes by Gel
	None	Real Time Polymerase Chain
	and Escherichia coli count	9222 H
	Coliform and Escherichia coli	Presence/absence Technique
	pH	APHA 4500-H* B
	Colour	APHA 2120B
	Turbidity	APHA 2130B
	Free Chlorine	HACH Method No . 8021

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Ammonia as N	HACH Method No . 8038
	as Fe	HACH Method No . 8008
	Manganese as Mn	HACH Method No . 8149
	Fluoride as F	HACH Method No . 8029
	Aluminium as Al	HACH Method No . 8326
	pH	APHA 4500-H* B
	Colour	APHA 2120B
	Turbidity	APHA 2130B
	Free Chlorine	HACH Method No . 8021
	Ammonia as N	HACH Method No . 8038
	as Fe	HACH Method No . 8008
	Manganese as Mn	HACH Method No . 8149
	Fluoride as F	HACH Method No . 8029
	Aluminium as Al	HACH Method No . 8326
	Total Dissolved Solids	APHA 2540. C
	Total Dissolved Solids	APHA 2540. C
E Air (sedimentation) E Surface (direct Contact) E Surface (swab)	e Total Aerobic Bacteria Count e Total Yeast & Mould Count Total Coliform Count e Total Escherichia coli Count e Total Enterobacteriaceae	Compendium of Methods for the Microbiological Examination of Foods, APHA, 4" Edition (2001)
E Bird Nest And Edible Bird Nest	Nitrate e Nitrite e	In-house method, WI-TEC-M050, based on MS 2509:2015
E Cosmetics	Total Aerobic Microbial Count	U.S. Pharmacopeia
E Dairy Products E Flour And Confectionery E Non-alcoholic Beverages E Nut, Fruits And Vegetables And Derived Products	e Aflatoxin B1 e Aflatoxin B2 e Aflatoxin G1 e Aflatoxin G2	In-house method, WI-TEC-M021, based on AOAC 990.33,19" Edition 2012
E Deionized Water	Hexavalent Chromium	APHA 3500-Cr B, Edition 2012
E Drinking Water	e Barium	None
E Drinking Water E Deionized Water	Colour (ADMI)	In-house method, WI-TEC-M047, based on APHA 2120 F, 22"4
E E Natural Drugs (medicinal Plant Preparations)	Total Yeast & Molds Count	U.S. Pharmacopeia
	Escherichia coli	U.S. Pharmacopeia
E E Underground Water	Biochemical Oxygen Demand (BODs)	APHA 5210 B, Edition 2012
E Fish And Fish Products	Coliform	Food and Drug Administration,
E Fish And Fish Products E Sauces, Herbs, Spices And Condiments	Histamine	based on Journal of Chromatography A, 809 (1998) 241-245 using OPA Derivatization by HPLC Fluorescence Detector
E Flour And Confectionery	Organophosphate	None
E Flour And Confectionery E Dairy Products Non-alcoholic Beverages E Fish And Fish Products E Nut, Fruits And Vegetables E	Aerobic Plate Count	Compendium of Methods for the Microbiological Examination of Foods, APHA, Edition (2001). Pour Plate Method

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
E Flour And Confectionery E Meat, Poultry And Derived Products E Sauces, Herbs, Spices And Condiments	Glutamic Acid	In-house method, WI-TEC-M016, based on Food Chemistry 104 (2007) using OPA Derivatization by HPLC Fluorescence Detector
E Ground Water, Etc.	Chromium	APHA 3120 B (2012)
E Industrial Effluent	None	None
	Trivalent Chromium	APHA 3500-Cr B & APHA 3120 B,
	Oil and Grease	In-house method, WI-TEC-M044,
	Arsenic	None
E Industrial Effluent Water	Total Dissolved Solids	APHA 2540 C, 22" Edition 2012
E Liquid Waste E Industrial Effluent	Arsenic Barium	None
E Medical Devices	e Aerobic Bacteria	ISO 11737-1:2006
E Mineral Water	e Aluminium	None
	None	(2012) & Sample pre-treatment for
E Mineral Water Pharmaceutical Water E Distilled Demineralized E Reverse Osmosis Water E Ultrapure Water E	Total Heterotrophic Count	2012
	Total Heterotrophic Count	In-house method, WI-TEC-M010M based on APHA 9215 D, 22"4 Edition 2012
E Nuts, Fruits And Vegetables And Derived Product	Azinphos-ethyl Azinphos-methyl e Bromophos-ethyl	None
E Personal Care	None	None
E Pollutant In Air	Aluminium	None
E Potable & Domestic Water	None	based on APHA 9215 B, 22" Edition
E Reverse Osmosis Water	Boron e	None
E River Water	Calcium	None
E River Water E Potable & Domestic Water	None	metal analysis APHA 3030 F (2012)
E Sauces, Herbs, Spices And	e Aflatoxin M1	None
E Sauces, Herbs, Spices And Condiments E Meat, Poultry And Derived Products	Salt content (as sodium chloride)	MS 1120: 2004
	pH	MS 1120: 2004
E Solid Waste E Liquid Waste E Sludge Waste	e Aluminium Arsenic e Barium Boron	None
E Stationary Source	None	based on MS 1596:2003 -”
E Underground Water	Total Suspended Solids	APHA 2540 D, Edition 2012
	None	None
E Vinegar And Sauces, Herbs, Spices And Condiments	Acidity (as acetic acid)	MS 1120: 2004
E Wastewater	e Aluminium	None
	e Aluminium	None
E Work Place Environment And Hazard	Methyl Ethyl Ketone	based on NIOSH Method 2500:1996, US NIOSH Manual of
E Work Place Environment And Hazard (continued)	Gallium e Indium	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Edible Oils, Fats And Their E Products Fish And Fish Products Flour And Confectionery Meat, Poultry And Derived Products Non-alcoholic Beverages	e Monounsaturated Fat e Polyunsaturated Fat e Saturated Fat e Trans Fat Omega Fatty Acid of n-3 and n-6	In-house method, WI-TEC-M019, based on AOAC 969.33 Edition 2012 and AOCS Ce 1e-91 and AOCS Ce 1- 62
Emissions	Particulate Matter	Determination of concentration and mass flow of particulate matter in
Environment Monitoring	None	In-house method, WI-TEC-M033,
	None	None
	None	None
	None	None
	None	None
Environmental Monitoring	Metals by ICP	None
	Metals by ICP	None
	Metals by ICP	None
	None	In-house method, WI-TEC-S001,
	None	None
	None	None
	None	None
	Determination of Concentration and Mass Flow of Particulate	MS 1596: 2003
	Determination of Total Suspended Particulate Matter in	ASTM: D4096-91 (2003)
	Sound pressure level	Guidelines for Environmental Noise Limits and Control, Third Edition
	None	None
	None	None
	None	None
	Boron	APHA 4500-B C, 2005 APHA 4500-B C, 2017
	Sulphide	APHA 4500- D, 2005 APHA 4500-D, 2017
	Metal Analysis by ICP-OES	None
	Hydrocarbon	APHA 5520 F 2005
	None	None
	Hydrogen Bromide (HBr)	OSHA Method ID-165SG
	Temperature	APHA 2550 B, 2005
	None	None
	None	None
	Formaldehyde	In-house Method C/WTR/012
	None	None
	Aluminium	None
	Aluminium	None
	Nickel	APHA 3120 B, 24" Edition
	pH	APHA 4500 H*B
	pH	APHA 4500 H*B

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	None
	None	None
	None	None
	COD	APHA 5220 D
	Heavy Metals	None
	Moisture	EPA Method 9000 (Karl Fischer Titration)
	None	EPA Method 1010 A
	None	Information Circular 8333,
	Total Bacteria Count	Compendium of Methods for the
	Aerobic Plate Count	In-house swab contact method
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
Environmental Monitoring E Pollutant In Air	Methyl Ethyl Ketone	NIOSH Method 2500:1996, US NIOSH Manual of Analytical Methods, Edition (Sampling)
	None	NIOSH Method 1500:2003, US
Environmental Monitoring E Stationary Source Emissions	Metals by ICP e Antimony e Arsenic	None
	e Sulphuric Acid e Sulphur Dioxide	USEPA 40 CFR 60, App. A, Method No. 8 - Determination of Sulphuric Acid and Sulphur Dioxide Emission
Fish And Fish Products	Carbohydrate	Labeling, AOAC: 1993 and Food
	None	None
	Chlortetracycline	by UHPLC
	None	In House Method MY/STP/179
	Nitrofuran metabolites	In-house method SGS-TM-FOOD-
	Biogenic Amines	In-house Method Ref. No. MOH:
	Putrescine	In-house Method, Ref. No, MOH:
	Danofloxacin	In-House Method, Ref. No. MOH:
	Pesticide Residues: Alpha-BHC Gamma-BHC Delta-HCH	In-house method, Ref. No. MOH: F03-009-Determination of Pesticide Residues in Fish, Meat, Poultry and Its Products using QUEChERS Method by Gas Chromatography.
	Benzimidazole:	In-house Method, Ref. No. MOH

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	Microwave Digestion, ICP-OES
	Histamine	In-house Method LWI-TEC-
	None	None
	Tin	None
	None	None
	None	None
	Yeast and Molds Count	(3M-„¢ Petrifilm-„¢ Rapid Yeast
	Formaldehyde	In-house Method, Ref. No. MOH
Flour And Confectionery	Cholesterol	based on AOAC 994.10 Edition
	None	F019 based on FDA Method
	None	None
	Aflatoxin G2	None
	None	None
	None	None
	None	None
	None	(MPN & Spread Plate
	None	None
Flour And Confectionery E Sauces, Herbs, Spices E And Condiments	Vitamin A (Retinol)	In-house method, WI-TEC-M020, based on AOAC 992.06,19"" Edition 2012
Flour And Confectionery Sauces, Herbs, Spices	Moisture	based on AOAC 984.25,19"' Edition 2012
Food	None	In-house method, WI-TEC-M001,
	None	None
	None	In-house method, WI-TEC-M014,
	None	None
	None	None
	Pesticides	None
	None	None
	None	None
	None	None
	None	AOAC 990.12,19" Edition 2012
	None	In-house method, WI-TEC-M015M,
	Fat	In-house Method SOP-0217-1008
	Total Sugar (Titration)	AOAC 968.28, Edition, 2005
	Vitamin C	In-house Method SOP-0217-1015 by
	Energy as Calories	In-house Method SOP-0217-1032
	Shigella	FDA/BAM Chapter 6, Feb 2013
	None	None
	None	None
	Tin (Sn)	In-house Method C/FOD/029
	None	None
	Ascorbic Acid (Vitamin C)	In-house Method C/FOD/003
	None	None
	None	None
	None	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Staphylococcus aureus -” Most Probable Number	AOAC 987.09
	Enumeration of Mesophilic Lactic Acid	ISO 15214: 1998
	None	None
	Detection & Enumeration of Coliform	AS 5013.3 - 2022
	Enumeration of Coliform	FDA-BAM Chapter 4 (I.G)
	Detection & Enumeration of Escherichia coli	AS 5013.15 -” 2006
	Enumeration of Escherichia coli	FDA-BAM Chapter 4 (I.G)
	Detection of Salmonella spp.	AS 5013.10 - 2009
	Enumeration of Yeast and Molds	FDA -” BAM Chapter: 18
	Detection of Listeria monocytogenes	In-house Method M/FOD/010 based on FDA -” BAM Chapter 10:2011
	Enumeration of Bacillus cereus	In-house Method M/FOD/011 based on FDA -” BAM Chapter 14:2012
	Enumeration of Fecal Coliform	CMME of Foods - Chapter 8.8
	Clostridium perfringens Count	ISO 7937:2004
	Tin	None
	Sugar Profile:	In-house method SGS-TM-FOOD-104
	Folic acid	In-house method SGS-TM-FOOD-106
	Metals Contaminants Arsenic, As Lead, Pb Copper, Cu	In-House Method, SGS-WI-LAB-028 based on AOAC 986.15, 975.03, 922.02, 2011.14 & 2015.01, APHA 3120B and APHA 3125B
	Total Sugars	In-house method, SGS-TM-FOOD-
	Water activity	In-house method, SGS-TM-FOOD-
	None	None
	Vitamin A	In-house method SGS-TM-FOOD-050 based on Bull. Dept. Med Sci, Vol 37, No. 1 Jan -” March 1995,
	Total Aerobic Count	AOAC 989.10: 2005 & AOAC
	Listeria monocytogenes	In-house method, SGS-TM-MICR-
	None	None
	Porcine DNA	In-house method, SGS-TM-BIOT-
	Total Plate Count	AS 1766.2.1-1991
	Listeria monocytogenes	ISO 11290-1:2017 (E) / Detection
	Salmonella spp.	ISO 6579:2017 (E) / Detection
	Bacillus cereus	ISO 7932:2004 (E) / Enumeration

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Bacillus cereus	ISO 21871:2006 (E) / Detection and
	Vibrio parahaemolyticus	ISO/TS 21872-1:2017(E) / Detection
	Escherichia coli	ISO 7251:2005 (E) / Detection and
	E. Coli 0157	ISO 16654:2001(E) / Detection
	Yeast and Mould Count	In-house method Ref. No. MOH:
	Aerobic Plate Count	In-house method based on AOAC
	Coliform	ISO 4831:2006 (E) / Detection and
	Mesophilic Lactic Acid Bacteria	ISO 15214:1998 (E) / Enumeration
	DNA Extraction	In-house Method, Ref. No. MOH
	Benzoic acid	In-house Method, Ref. No. MOH:
	Saccharin	In-house Method, Ref. No. MOH:
	Sulphur Dioxide	In-House Method, Ref. No. MOH:
	Boric acid	In- House Method, Ref. No. MOH:
	Formaldehyde	In-house Method, Ref. No. MOH:
	Egg Allergen ? Qualitative	In-house Method, Ref. No. MOH:
	Peanut Allergen ? Qualitative	In-house Method, Ref. No. MOH:
	Milk Allergen- Qualitative	In-house Method, Ref. No. MOH:
	Gliadin Allergen ? Qualitative	In-house Method, Ref. No. MOH:
	Soy Allergen- Qualitative	In-House Method Ref. No. MOH
	Crude Fibre	AOCS Ba 6-84
	None	Microbiology of food and animal
	None	feeding stuffs- Horizontal method for
	Listeria monocytogenes	the detection and enumeration of
	Listeria monocytogenes	Listeria monocytogenes- Part 1:
	Listeria monocytogenes	Detection Method
	Listeria monocytogenes	Method No: MOH
	Listeria monocytogenes	AOAC Official Method 991.14 3M-„¢
	Escherichia coli / Coliform	Petrifilm-„¢ E.coli / coliform count Plates
	Escherichia coli / Coliform	Method No: MOH K03-203
	Escherichia coli / Coliform	AOAC Official Method 990.12 3M-„¢
	Aerobic Count Plates	Petrifilm-„¢ Aerobic Count Plates
	Aerobic Count Plates	Method No: MOH
	Aerobic Count Plates	AOAC Official Method 2003.07
	Staphylococcus aureus	2003.08, 2003.11 3M-„¢ Staph Express Count Plate
	Staphylococcus aureus	Method No: MOH K03-205
	Staphylococcus aureus	AS/NZS 1766.2.9:1997 Examination
	Staphylococcus aureus	for specific organisms- Vibrio
	Vibrio parahaemolyticus	parahaemolyticus of Australian
	Vibrio parahaemolyticus	Standard
	Vibrio parahaemolyticus	Method No: MOH K03-310

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Vibrio parahaemolyticus	ISO 7932, Third Edition 2004-06-16
	Vibrio parahaemolyticus	Microbiology of food and animal
	Vibrio parahaemolyticus	feeding stuffs -” Horizontal method
	Bacillus cereus	for the enumeration of presumptive
	Bacillus cereus	Bacillus cereus -” Colony- count
	Bacillus cereus	technique at 30°C
	Bacillus cereus	Method No: MOH (1)
	Bacillus cereus	ISO/TS 22964:2006 (E)
	Enterobacter sakazakii	IDF/RM 210:2006 (E) -” Detection of Enterobacter sakazakii
	Enterobacter sakazakii	Method No: MOH K03-115
	Enterobacter sakazakii	ISO 16654:2001 (E) -” Horizontal
	E. coli 0157	method for the detection of Escherichia coli 0157
	E. coli 0157	Method No: MOH
	Coagulase positive	ISO 6888-1:1999/Amd.1:2003 (E)
	staphylococci	Method No: MOH KO3-105 (1)
	Vibrio Species other than cholerae	other than Vibrio parahaemolyticus
	Vibrio Species other than cholerae	and Vibrio cholera
	Vibrio Species other than cholerae	Method No: MOH KO03-111 (2)
	Vibrio Species other than cholerae	ISO 10272 -” 1: 2006 (E) Horizontal
	Vibrio Species other than cholerae	Method for Detection and
	Camphylobacter spp	Enumeration of Camphylobacter spp. -” Part 1: Detection Method
	Camphylobacter spp	Method No: MOH (1)
	Camphylobacter spp	ISO 11290-2: 1998 / Amd. 1:2004 (E)
	Camphylobacter spp	Horizontal Method for Detection and
	Camphylobacter spp	Enumeration of Listeria
	Listeria monocytogenes	Monocytogenes Part 2 = Enumeration Method, Amendment 1 :
	Listeria monocytogenes	Modification of enumeration Medium
	Listeria monocytogenes	Method No: MOH (1)
	Boric Acid	E03-003 The Determination of
	Water soluble synthetic food	Water Soluble Synthetic Food
	colour (see Appendix |)	Colour in Food by Paper
	colour (see Appendix |)	Chromatography and UV/ V15
	colour (see Appendix |)	spectrophotometer
	colour (see Appendix |)	In -” House Method, Ref. No. MOH
	Total Plate Count (TPC)	FDA Food and Drug =
	Determination of Boric acid in Food	FQL-TM-FA205 In-House Method

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	by UV-Vis Spectrophotometer	based International Food on
	by UV-Vis Spectrophotometer	Research Journal 17: 1107-1112
	by UV-Vis Spectrophotometer	(2010)
	Total Plate Count in Food by	AOAC Official Method 990.12
	using 3M Petrifilm Aerobic Count	None
	Plate	None
	Enumeration of Escherichia Coli	AOAC Official Method 991.14
	in Food by using 3M Petrifilm	None
	Escherichia Coli/Coliform Count	None
	Plates	None
	Enumeration of Coliform in Food	AOAC Official Method 991.14
	by using 3M Petrifilm Escherichia	None
	Coli/Coliform Count Plates	None
	Enumeration of Staphylococcus	AOAC Official Method 2003.07
	Aureus in Food by using 3M	None
	Petrifilm Staph Express Count	None
	Plates	None
	Detection of Bacillus Cereus in	Compact Dry -œNissui-• Bacillus
	Food	Cereus
	Detection of Salmonella in Food	Bacteriological Analytical Manual,
	Detection of Salmonella in Food	Chapter 5, Salmonella
	Detection of Salmonella in Food	AOAC Official Method of Analysis
	by using 3M Petrifilm Salmonella	2014.1
	Express System	None
	Salmonella spp.	ISO 6579-1:2017
	Analysis of OrganophosphorusMethod: AOAC 2007.01 Analysis of Organophosphorus	Analysis of Organophosphorus
	Total Plate Count (TPC)	FDA Food and Drug =
	Aerobic Plate Count	AOAC Official Method 990.12 Aerobic
	Bacillus cereus	ISO 7932:2004 (E) Microbiology of Food
	Yeast and Mold	AOAC Official Method 2014.05
	Enumeration of	MOH Based on AOAC
	Enumeration of Mesophilic	MOH MMEF Part 4 Section
	Campylobacter spp	MOH (1): ISO 10272-
	Gram Negative Pathogens	In-house Method, Ref. No. MOH RO3-
	Boric Acid	In-house Method, Ref. No. MOH
	Water Soluble Colours	In-house Method, Ref. No. MOH
	Moisture	In-house Method Ref. No. MOH J03-
	Ash	MOH Determination Of Ash
	1) Antimoni	MOH The Determination of
	Water Activity	In-House Method MOH J03-049:
	Soluble Solid	In-House Method MOH J03-018:

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
	Mercury	In-House Method MOH H03-015:
	Acrylamide	In-House Method MOH NO3-015:
Food Dairy Products E	Fatty Acid Composition:	None
Food E Non-alcoholic Beverage Coffee And Coffee Products E Tea And Tea Products	Caffeine	In-house method, WI-TEC-M013, based on African Journal of Food Science Vol. 4(6), 2010 page 353 -" 358
Industrial Effluent E Water	None	Edition 2012
Material And Articles In E	Overall Migration into Food	None
	Overall Migration into Food	None
	Specific Migration into Aqueous	None
Medical Devices	Estimation of Product Bioburden	None
	Endotoxin	Test for Bacterial Endotoxin, BP
Mineral Water	None	None
	Hexavalent Chromium	APHA 3500 Cr B, Edition
	Chloride	APHA 4500-CI B, Edition
	Fluoride as F	Ion Chromatography with Chemical
	None	None
	(Monochloramine and	None
	None	None
	None	None
	Alkalinity	APHA 2320 B, 2017
	Free Carbon Dioxide	APHA 4500-COz C, 2017
	Sodium (Na)	APHA 3120 B 2017
	None	None
	None	None
	Dieldrin	None
	None	None
	None	None
	None	None
	None	None
	Aluminum as Al	None
Mineral Water E	None	None
	None	None
	Aldrin Dieldrin	None
Non-alcoholic	None	2012
Nut, Fruits And Vegetables	None	None
Personal Care E Household Products E	e Arsenic, As e Mercury, Hg	ASEAN Cosmetic Method (ACM) 005 (Revision 3, May 2013)
Potable & Domestic Water E	None	None
Products Meat, Poultry And Derived Products	Arsenic, Mercury	In-house method, WI-TEC-M022, based on AOAC 977.15, 19" Edition 2012
River Water E	None	None
	Paraquat	In House Method 0598 based on
Sauces, Herbs, Spices	None	2012
	None	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Cholesterol	None
Sauces, Herbs, Spices And	None	None
	None	Detection using OPA
	None	None
	None	column and UV detection
	None	None
	None	None
	None	None
	None	None
Sewage E Potable & Domestic Water E River Water E E Underground Water	Ammoniacal Nitrogen	APHA 4500-NH3 B&C, Edition (2012)
Sewage E River Water	None	None
Sewage Water E	None	None
	Turbidity	APHA 2130 B, 2005 APHA 2130 B, 2017
	None	APHA 4500-F- C, 2017
	pH Value	APHA 4500-H+ B, 2005 APHA 4500-H+ B, 2017
Sewage Water E River Water	None	based on APHA 5520 B, Edition 2012
Sugar And Sugar Products E	None	None
Sugar And Sugar Products Nut, Fruits And	Vitamin C (Ascorbic acid)	In-house method, based on HPLC with HILIC column and UV detection
Surface (swab)	None	Compendium of Methods for the
Tap Water Underground Water	pH	APHA 4500H* B, 22" Edition 2012
Underground Water E	None	None
Urine E Urine	2,5-Hexanedione	In-house method, WI-TEC-M058, based on NMAM 8318:2017, US
Vegetables And Derived	None	None
Vegetables And Derived Products	Element (Al, Ca, Cd, Cu, Pb, Na, Sn, Sb, Fe, Zn)	In-house method, WI-TEC-M010, based on AOAC 985.01,19" Edition 2012
Water	None	None
	Metals by ICP	None
	None	None
	None	None
	None	None
	None	None
	None	None
	pH	ASTM D 1293-2005 (Method B) APHA 4500 H* B 2005/2017
	pH	ASTM D1293-2005 (Method B) APHA 4500 H* B 2005/2017
	None	None
	Turbidity	APHA 2130B

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	On-site Sampling & Testing (pH Temperature, Turbidity)	In-house Method SOP-0222-2001 & SOP-0222-2003
	Coliform	APHA 9221 B, Edition, 2005
	Heterotrophic plate count in	APHA Method 9215 D, Edition,
	None	None
	None	None
	pH Value	BS 1377-3 : 2018 Clause 12
	pH Value	BS 1377-3 : 2018 Clause 12
	None	None
	Calcium Hardness as CaCO3,	APHA 3500-Ca B, 2017
	Magnesium (by Calculation Method)	APHA 3500-Mg B, 2017
	Nitrate	APHA E, 2017
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	Aluminium	None
	None	None
	Organochlorine Pesticide	APHA 6630 B, Edition
	Ammoniacal Nitrogen	APHA F, 24" Edition
	Arsenic	APHA 3125 B, Edition
	Mercury	In-house method, SGS-TM-ENVI-003, based on APHA 3125 B
	2,4-dichlorophenoxyacetic acid (2,4-D)	In-house method, SGS-TM-02-045, based on Agilent Application Note 5991-5731 EN (LCMSMS)
	Heavy Metals by ICP-MS	None
	Endotoxin	Test for Bacterial Endotoxin, BP 2022
	pH	APHA 4500 H*B
	Oil & Grease	APHA 5520 B
	Color	APHA 2120 B
	Color	APHA 2120 F
	pH	APHA 4500 H* B
	Turbidity	APHA 2130 B
	Conductivity	APHA 2510 B
	None	None
	None	None
	None	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Escherichia coli and coliform	ISO 9308-1: 2014 (E) / Enumeration
	Pseudomonas aeruginosa	ISO 16266:2006 (E) / Detection and
	Ammonium nitrogen	BS 6068: Section 2.7:1984 ISO 5664:1984
	Chemical Oxygen Demand	BS 6068: Section 2.34:1988
	Suspended solids	BS 2690-Part 120:1981
	Dissolved solids	BS 2690-Part 121:1981
	None	ASTM D 523-82
	COD	APHA 5220 D
	None	None
	Free Chlorine	APHA' 4500 -" CI G
	Count	(Pour Plate, Spread Plate and
	Anaerobes (Clostridia)	BS 6068-4:9: 1993
	Gross Alpha & Gross Beta	None
	Arsenic as As	None
	Antimony as Sb	None
	Aluminium as Al	None
	Beryllium as Be	None
	Cadmium as Cd	None
	Chromium as Cr	None
	Lead as Pb	None
	Silver as Ag	None
	Selenium as Se	None
	Thallium as TI	None
	Mercury as Hg	In-house Method LWI-MWE 037 based on APHA 3112 B by
	Mercury as Hg	Mercury Analyser
	Nitrate	In-house Method LWI-MWE 032 based on HACH Nitrate
	Nitrate	Test Comparator
	Sulfide	HACH Method 8131
	Chlorine, Free Residual	In-house Method LWI-MWE
	Chlorine, Free Residual	034 based on DPD-Palintest
	Chlorine, Free Residual	Test Comparator
	Total Chlorine	In-house Method LWI-MWE
	Total Chlorine	035 based on DPD-Palintest
	Total Chlorine	Test Comparator
	Colour (ADMI)	APHA 2120 F
	Heterotrophic Plate Count	None
	Pseudomonas aeruginosa	In-house Method LWI-MME (APHA) 007
	Pseudomonas aeruginosa	based on APHA 9213 E, 2020
	Escherichia coli and Coliform	Escherichia coli and Coliform Bacteria. Part 1: Membrane filtration
	Escherichia coli and Coliform	method

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Escherichia coli and Coliform	Method No: MOH (1)
	Escherichia coli and Coliform	ISO 29981 : 2010 (E), IDF 220 :
	Escherichia coli and Coliform	2010 (E) Milk Products -
	None	None
	None	None
	None	None
	None	None
Water E Deionized Water	Anions	None
Water E Potable & Domestic Water	Metals by ICP e Aluminium	None
Water River Water	None	None

SCOPE OF TESTING : CHEMICAL (INDUSTRIAL HYGIENE)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
(standard A)	Barium Boron	None
(standard B)	Boron Cadmium	None
And Condiments	None	In-house method, WI-TEC-M002,
	Escherichia coli	AOAC Edition 2012
	Staphylococcus aureus	AOAC 2003.07/2003.08/2003.11, 19! Edition 2012
	Enterobacteriaceae Count	AOAC 2003.01,19' Edition 2012
	Salmonella	AOAC 2014.01
	Yeast & Mould	AOAC 2014.05
	Yeast & Mould	Food and Drug Administration, Bacteriological Analytical Manual,
	Benzoic Acid	In-house method, SGS-TM-FOOD-021
	None	None
	Cholesterol	None
And Condiments Dairy Products Non-alcoholic Beverages	Benzoic acid & Sorbic acid	In-house method, WI-TEC-M008, based on AOAC 994.11,19"" Edition 2012
And Derived Products	None	None
And Derived Products Sauces, Herbs, Spices E	Coliform	AOAC Edition 2012
Beverages Sugar And Sugar Products Fruits And	Sulphur dioxide	AOAC 990.28 ,19"' Edition 2012
Beverages Sugar And Sugar Products Nut, Fruits And Vegetables And Derived Products Meat, Poultry And	Total fat	In-house method, based on AOAC 989.05,19" Edition 2012 / AOAC 920.39,19"" Edition 2012
	Crude Protein/Total Nitrogen	In-house method, WI-TEC-M004, based on MS 1194:1999

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Boiler Water	None	None
	Total Dissolved Solids	APHA 2540 C, 2017
	Acidity	APHA 2310. B
	Acidity	APHA 2310. B
Chemical	None	None
	None	None
	None	None
	None	None
Chemicals	None	None
Condiments	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	Derivatisation
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
Contact With Foodstuffs	Simulants by Total Immersion	None
	Simulants by Pouch	None
	Food Simulants and Test Media	None
Cosmetics E	Heavy Metals	None
	Heavy Metals (As, Pb, Co, Cr,	In-house Method C/COS/023 based
Dairy Products	Ash	based on AOAC Edition
	Vitamin A palmitate	In-House Method SOP-0217-1029
	None	Method
	None	By Mojonnier (gravimetric)
	Moisture	In-house Method 0509 based on
	Majonnier Fat	AOAC 932.06, Edition
	None	None
	None	None
	Shigella species	FDA-BAM Chapter 6, 2014
	None	None
	None	None
	None	AOAC, 1993)
	None	None
	Water activity	AOAC 978.18 (2000)
	None	Fluorescence Detection
	Vitamin B5	In-house method LWI-TEC-
	None	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Ascorbic Acid	In-house method LWI-TEC-
	Vitamin A (Retinol)	In-house method LWI-TEC-
	None	None
	None	(Pour Plate Technique)
	None	(Detection, MPN & Spread Plate
	Enterobacteriaceae Detection	ISO 21528-1: 2004
	Aerobic Plate Count	3M-„¢ Petrifilm-„¢ Rapid Aerobic
	None	None
Dairy Products Non-alcoholic	None	None
Deionized Water Industrial Effluent	Conductivity	APHA 2510 B, 22" Edition 2012
Derived Products	None	Methods of Analysis for Nutrition
	None	LC/MS/MS
	Nitrofuran Metabolites (AMOZ, AHD, AOZ, SEM)	In House Method Based on Agilent Application Notes: ESI LC/MS/MS
	None	None
	None	None
	None	None
	None	None
	Detection of	MY/STP/365 using real PCR
	Vitamin B3 (Nicotinic acid and	In-house method, SGS-TM-FOOD-
	None	None
	Aflatoxin B2	F028 based on 990.33
	None	None
	None	None
	None	None
	Cholesterol	None
Distilled Water E Domestic Water E Drinking Water E Mineral Water E Reverse Osmosis Water E Swimming Pool Water E Cooling Tower Water E	e Fluoride e Chloride Nitrite e Bromide Nitrate e Phosphate e Sulfate	APHA 4110 B (2012)
Drinking Water	None	None
	pH	APHA 4500-H + B, 21% Edition
	Trivalent Chromium	In-House Method SOP-0217-2029
	None	None
	Chloride as Cl	Suppression of Eluent Conductivity
	Conductivity	APHA 2510 B, 21% Edition
	Combined Chlorine as Cl2	APHA 4500-Cl G, 21st Edition 2005
	None	None
	Staphylococcus aureus	AOAC OMA 2003.08
	Chlorite (ClO2)	In House Method 6023, based on
	None	None
	None	None
	Mineral Oil	APHA 5520 F
	Fluoride	APHA C

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	None
	Heterotrophic Plate Count	APHA 9215 D
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	126, based on Thermo Fisher Application Noted 154
	Phenol	APHA 6420C, 24" Edition
	None	In-house method SGS-TM-ENVI-W-
	Organochlorine Pesticide	APHA 6630B, 24" Edition
	Conductivity	APHA 2510 B
	None	Boiling Cell Method
	None	QIAGEN Mericon? Bacteria Kit
	None	spp. by Gel Electrophoresis
	None	monocytogenes by Gel
	None	Real Time Polymerase Chain
	and Escherichia coli count	9222 H
	Coliform and Escherichia coli	Presence/absence Technique
	pH	APHA 4500-H* B
	Colour	APHA 2120B
	Turbidity	APHA 2130B
	Free Chlorine	HACH Method No . 8021
	Ammonia as N	HACH Method No . 8038
	as Fe	HACH Method No . 8008
	Manganese as Mn	HACH Method No . 8149
	Fluoride as F	HACH Method No . 8029
	Aluminium as Al	HACH Method No . 8326
	pH	APHA 4500-H* B
	Colour	APHA 2120B
	Turbidity	APHA 2130B
	Free Chlorine	HACH Method No . 8021
	Ammonia as N	HACH Method No . 8038
	as Fe	HACH Method No . 8008
	Manganese as Mn	HACH Method No . 8149
	Fluoride as F	HACH Method No . 8029
	Aluminium as Al	HACH Method No . 8326
	Total Dissolved Solids	APHA 2540. C
	Total Dissolved Solids	APHA 2540. C
E Air (sedimentation) E Surface (direct Contact) E Surface (swab)	e Total Aerobic Bacteria Count e Total Yeast & Mould Count Total Coliform Count e Total Escherichia coli Count e Total Enterobacteriaceae	Compendium of Methods for the Microbiological Examination of Foods, APHA, 4" Edition (2001)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
E Bird Nest And Edible Bird Nest	Nitrate e Nitrite e	In-house method, WI-TEC-M050, based on MS 2509:2015
E Cosmetics	Total Aerobic Microbial Count	U.S. Pharmacopeia
E Dairy Products E Flour And Confectionery E Non-alcoholic Beverages E Nut, Fruits And Vegetables And Derived Products	e Aflatoxin B1 e Aflatoxin B2 e Aflatoxin G1 e Aflatoxin G2	In-house method, WI-TEC-M021, based on AOAC 990.33,19" Edition 2012
E Deionized Water	Hexavalent Chromium	APHA 3500-Cr B, Edition 2012
E Drinking Water	e Barium	None
E Drinking Water E Deionized Water	Colour (ADMI)	In-house method, WI-TEC-M047, based on APHA 2120 F, 22"4
E E Natural Drugs (medicinal Plant Preparations)	Total Yeast & Molds Count	U.S. Pharmacopeia
	Escherichia coli	U.S. Pharmacopeia
E E Underground Water	Biochemical Oxygen Demand (BODs)	APHA 5210 B, Edition 2012
E Fish And Fish Products	Coliform	Food and Drug Administration,
E Fish And Fish Products E Sauces, Herbs, Spices And Condiments	Histamine	based on Journal of Chromatography A, 809 (1998) 241-245 using OPA Derivatization by HPLC Fluorescence Detector
E Flour And Confectionery	Organophosphate	None
E Flour And Confectionery E Dairy Products Non-alcoholic Beverages E Fish And Fish Products E Nut, Fruits And Vegetables E	Aerobic Plate Count	Compendium of Methods for the Microbiological Examination of Foods, APHA, Edition (2001). Pour Plate Method
E Flour And Confectionery E Meat, Poultry And Derived Products E Sauces, Herbs, Spices And Condiments	Glutamic Acid	In-house method, WI-TEC-M016, based on Food Chemistry 104 (2007) using OPA Derivatization by HPLC Fluorescence Detector
E Ground Water, Etc.	Chromium	APHA 3120 B (2012)
E Industrial Effluent	None	None
	Trivalent Chromium	APHA 3500-Cr B & APHA 3120 B,
	Oil and Grease	In-house method, WI-TEC-M044,
	Arsenic	None
E Industrial Effluent Water	Total Dissolved Solids	APHA 2540 C, 22" Edition 2012
E Liquid Waste E Industrial Effluent	Arsenic Barium	None
E Medical Devices	e Aerobic Bacteria	ISO 11737-1:2006
E Mineral Water	e Aluminium	None
	None	(2012) & Sample pre-treatment for
E Mineral Water Pharmaceutical Water E Distilled Demineralized E Reverse Osmosis Water E Ultrapure Water E	Total Heterotrophic Count	2012
	Total Heterotrophic Count	In-house method, WI-TEC-M010M based on APHA 9215 D, 22"4 Edition 2012
E Nuts, Fruits And Vegetables And Derived Product	Azinphos-ethyl Azinphos-methyl e Bromophos-ethyl	None
E Personal Care	None	None
E Pollutant In Air	Aluminium	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
E Potable & Domestic Water	None	based on APHA 9215 B, 22" Edition
E Reverse Osmosis Water	Boron e	None
E River Water	Calcium	None
E River Water E Potable & Domestic Water	None	metal analysis APHA 3030 F (2012)
E Sauces, Herbs, Spices And	e Aflatoxin M1	None
E Sauces, Herbs, Spices And Condiments E Meat, Poultry And Derived Products	Salt content (as sodium chloride)	MS 1120: 2004
	pH	MS 1120: 2004
E Solid Waste E Liquid Waste E Sludge Waste	e Aluminium Arsenic e Barium Boron	None
E Stationary Source	None	based on MS 1596:2003 -”
E Underground Water	Total Suspended Solids	APHA 2540 D, Edition 2012
	None	None
E Vinegar And Sauces, Herbs, Spices And Condiments	Acidity (as acetic acid)	MS 1120: 2004
E Wastewater	e Aluminium	None
	e Aluminium	None
E Work Place Environment And Hazard	Methyl Ethyl Ketone	based on NIOSH Method 2500:1996, US NIOSH Manual of
E Work Place Environment And Hazard (continued)	Gallium e Indium	None
Edible Oils, Fats And Their E Products Fish And Fish Products Flour And Confectionery Meat, Poultry And Derived Products Non-alcoholic Beverages	e Monounsaturated Fat e Polyunsaturated Fat e Saturated Fat e Trans Fat Omega Fatty Acid of n-3 and n-6	In-house method, WI-TEC-M019, based on AOAC 969.33 Edition 2012 and AOCS Ce 1e-91 and AOCS Ce 1- 62
Emissions	Particulate Matter	Determination of concentration and mass flow of particulate matter in
Environment Monitoring	None	In-house method, WI-TEC-M033,
	None	None
	None	None
	None	None
	None	None
Environmental Monitoring	Metals by ICP	None
	Metals by ICP	None
	Metals by ICP	None
	None	In-house method, WI-TEC-S001,
	None	None
	None	None
	None	None
	Determination of Concentration and Mass Flow of Particulate	MS 1596: 2003
	Determination of Total Suspended Particulate Matter in	ASTM: D4096-91 (2003)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Sound pressure level	Guidelines for Environmental Noise Limits and Control, Third Edition
	None	None
	None	None
	None	None
	Boron	APHA 4500-B C, 2005 APHA 4500-B C, 2017
	Sulphide	APHA 4500- D, 2005 APHA 4500-D, 2017
	Metal Analysis by ICP-OES	None
	Hydrocarbon	APHA 5520 F 2005
	None	None
	Hydrogen Bromide (HBr)	OSHA Method ID-165SG
	Temperature	APHA 2550 B, 2005
	None	None
	None	None
	Formaldehyde	In-house Method C/WTR/012
	None	None
	Aluminium	None
	Aluminium	None
	Nickel	APHA 3120 B, 24" Edition
	pH	APHA 4500 H*B
	pH	APHA 4500 H*B
	None	None
	None	None
	None	None
	COD	APHA 5220 D
	Heavy Metals	None
	Moisture	EPA Method 9000 (Karl Fischer Titration)
	None	EPA Method 1010 A
	None	Information Circular 8333,
	Total Bacteria Count	Compendium of Methods for the
	Aerobic Plate Count	In-house swab contact method
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Environmental Monitoring E Pollutant In Air	Methyl Ethyl Ketone	NIOSH Method 2500:1996, US NIOSH Manual of Analytical Methods, Edition (Sampling)
	None	NIOSH Method 1500:2003, US
Environmental Monitoring E Stationary Source Emissions	Metals by ICP e Antimony e Arsenic	None
	e Sulphuric Acid e Sulphur Dioxide	USEPA 40 CFR 60, App. A, Method No. 8 - Determination of Sulphuric Acid and Sulphur Dioxide Emission
Fish And Fish Products	Carbohydrate	Labeling, AOAC: 1993 and Food
	None	None
	Chlortetracycline	by UHPLC
	None	In House Method MY/STP/179
	Nitrofuran metabolites	In-house method SGS-TM-FOOD-
	Biogenic Amines	In-house Method Ref. No. MOH:
	Putrescine	In-house Method, Ref. No, MOH:
	Danofloxacin	In-House Method, Ref. No. MOH:
	Pesticide Residues: Alpha-BHC Gamma-BHC Delta-HCH	In-house method, Ref. No. MOH: F03-009-Determination of Pesticide Residues in Fish, Meat, Poultry and Its Products using QUEChERS Method by Gas Chromatography.
	Benzimidazole:	In-house Method, Ref. No. MOH
	None	Microwave Digestion, ICP-OES
	Histamine	In-house Method LWI-TEC-
	None	None
	Tin	None
	None	None
	None	None
	Yeast and Molds Count	(3M-„¢ Petrifilm-„¢ Rapid Yeast
	Formaldehyde	In-house Method, Ref. No. MOH
Flour And Confectionery	Cholesterol	based on AOAC 994.10 Edition
	None	F019 based on FDA Method
	None	None
	Aflatoxin G2	None
	None	None
	None	None
	None	None
	None	(MPN & Spread Plate
	None	None
Flour And Confectionery E Sauces, Herbs, Spices E And Condiments	Vitamin A (Retinol)	In-house method, WI-TEC-M020, based on AOAC 992.06,19"" Edition 2012
Flour And Confectionery Sauces, Herbs, Spices	Moisture	based on AOAC 984.25,19"' Edition 2012
Food	None	In-house method, WI-TEC-M001,

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	None
	None	In-house method, WI-TEC-M014,
	None	None
	None	None
	Pesticides	None
	None	None
	None	None
	None	None
	None	AOAC 990.12,19" Edition 2012
	None	In-house method, WI-TEC-M015M,
	Fat	In-house Method SOP-0217-1008
	Total Sugar (Titration)	AOAC 968.28, Edition, 2005
	Vitamin C	In-house Method SOP-0217-1015 by
	Energy as Calories	In-house Method SOP-0217-1032
	Shigella	FDA/BAM Chapter 6, Feb 2013
	None	None
	None	None
	Tin (Sn)	In-house Method C/FOD/029
	None	None
	Ascorbic Acid (Vitamin C)	In-house Method C/FOD/003
	None	None
	None	None
	None	None
	Staphylococcus aureus -” Most Probable Number	AOAC 987.09
	Enumeration of Mesophilic Lactic Acid	ISO 15214: 1998
	None	None
	Detection & Enumeration of Coliform	AS 5013.3 - 2022
	Enumeration of Coliform	FDA-BAM Chapter 4 (I.G)
	Detection & Enumeration of Escherichia coli	AS 5013.15 -” 2006
	Enumeration of Escherichia coli	FDA-BAM Chapter 4 (I.G)
	Detection of Salmonella spp.	AS 5013.10 - 2009
	Enumeration of Yeast and Molds	FDA -” BAM Chapter: 18
	Detection of Listeria monocytogenes	In-house Method M/FOD/010 based on FDA -” BAM Chapter 10:2011
	Enumeration of Bacillus cereus	In-house Method M/FOD/011 based on FDA -” BAM Chapter 14:2012
	Enumeration of Fecal Coliform	CMME of Foods - Chapter 8.8
	Clostridium perfringens Count	ISO 7937:2004
	Tin	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Sugar Profile:	In-house method SGS-TM-FOOD-104
	Folic acid	In-house method SGS-TM-FOOD-106
	Metals Contaminants Arsenic, As Lead, Pb Copper, Cu	In-House Method, SGS-WI-LAB-028 based on AOAC 986.15, 975.03, 922.02, 2011.14 & 2015.01, APHA 3120B and APHA 3125B
	Total Sugars	In-house method, SGS-TM-FOOD-
	Water activity	In-house method, SGS-TM-FOOD-
	None	None
	Vitamin A	In-house method SGS-TM-FOOD-050 based on Bull. Dept. Med Sci, Vol 37, No. 1 Jan -" March 1995,
	Total Aerobic Count	AOAC 989.10: 2005 & AOAC
	Listeria monocytogenes	In-house method, SGS-TM-MICR-
	None	None
	Porcine DNA	In-house method, SGS-TM-BIOT-
	Total Plate Count	AS 1766.2.1-1991
	Listeria monocytogenes	ISO 11290-1:2017 (E) / Detection
	Salmonella spp.	ISO 6579:2017 (E) / Detection
	Bacillus cereus	ISO 7932:2004 (E) / Enumeration
	Bacillus cereus	ISO 21871:2006 (E) / Detection and
	Vibrio parahaemolyticus	ISO/TS 21872-1:2017(E) / Detection
	Escherichia coli	ISO 7251:2005 (E) / Detection and
	E. Coli 0157	ISO 16654:2001(E) / Detection
	Yeast and Mould Count	In-house method Ref. No. MOH:
	Aerobic Plate Count	In-house method based on AOAC
	Coliform	ISO 4831:2006 (E) / Detection and
	Mesophilic Lactic Acid Bacteria	ISO 15214:1998 (E) / Enumeration
	DNA Extraction	In-house Method, Ref. No. MOH
	Benzoic acid	In-house Method, Ref. No. MOH:
	Saccharin	In-house Method, Ref. No. MOH:
	Sulphur Dioxide	In-House Method, Ref. No. MOH:
	Boric acid	In- House Method, Ref. No. MOH:
	Formaldehyde	In-house Method, Ref. No. MOH:
	Egg Allergen ? Qualitative	In-house Method, Ref. No. MOH:
	Peanut Allergen ? Qualitative	In-house Method, Ref. No. MOH:
	Milk Allergen- Qualitative	In-house Method, Ref. No. MOH:
	Gliadin Allergen ? Qualitative	In-house Method, Ref. No. MOH:
	Soy Allergen- Qualitative	In-House Method Ref. No. MOH
	Crude Fibre	AOCS Ba 6-84
	None	Microbiology of food and animal

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	feeding stuffs- Horizontal method for
	Listeria monocytogenes	the detection and enumeration of
	Listeria monocytogenes	Listeria monocytogenes- Part 1:
	Listeria monocytogenes	Detection Method
	Listeria monocytogenes	Method No: MOH
	Listeria monocytogenes	AOAC Official Method 991.14 3M-„¢
	Escherichia coli / Coliform	Petrifilm-„¢ E.coli / coliform count Plates
	Escherichia coli / Coliform	Method No: MOH K03-203
	Escherichia coli / Coliform	AOAC Official Method 990.12 3M-„¢
	Aerobic Count Plates	Petrifilm-„¢ Aerobic Count Plates
	Aerobic Count Plates	Method No: MOH
	Aerobic Count Plates	AOAC Official Method 2003.07
	Staphylococcus aureus	2003.08, 2003.11 3M-„¢ Staph Express Count Plate
	Staphylococcus aureus	Method No: MOH K03-205
	Staphylococcus aureus	AS/NZS 1766.2.9:1997 Examination
	Staphylococcus aureus	for specific organisms- Vibrio
	Vibrio parahaemolyticus	parahaemolyticus of Australian
	Vibrio parahaemolyticus	Standard
	Vibrio parahaemolyticus	Method No: MOH K03-310
	Vibrio parahaemolyticus	ISO 7932, Third Edition 2004-06-16
	Vibrio parahaemolyticus	Microbiology of food and animal
	Vibrio parahaemolyticus	feeding stuffs -” Horizontal method
	Bacillus cereus	for the enumeration of presumptive
	Bacillus cereus	Bacillus cereus -” Colony- count
	Bacillus cereus	technique at 30°C
	Bacillus cereus	Method No: MOH (1)
	Bacillus cereus	ISO/TS 22964:2006 (E)
	Enterobacter sakazakii	IDF/RM 210:2006 (E) -” Detection of Enterobacter sakazakii
	Enterobacter sakazakii	Method No: MOH K03-115
	Enterobacter sakazakii	ISO 16654:2001 (E) -” Horizontal
	E. coli 0157	method for the detection of Escherichia coli 0157
	E. coli 0157	Method No: MOH
	Coagulase positive	ISO 6888-1:1999/Amd.1:2003 (E)
	staphylococci	Method No: MOH KO3-105 (1)
	Vibrio Species other than cholerae	other than Vibrio parahaemolyticus
	Vibrio Species other than cholerae	and Vibrio cholera
	Vibrio Species other than cholerae	Method No: MOH KO03-111 (2)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Vibrio Species other than cholerae	ISO 10272 -" 1: 2006 (E) Horizontal
	Vibrio Species other than cholerae	Method for Detection and
	Camphylobacter spp	Enumeration of Camphylobacter spp. -" Part 1: Detection Method
	Camphylobacter spp	Method No: MOH (1)
	Camphylobacter spp	ISO 11290-2: 1998 / Amd. 1:2004 (E)
	Camphylobacter spp	Horizontal Method for Detection and
	Camphylobacter spp	Enumeration of Listeria
	Listeria monocytogenes	Monocytogenes Part 2 = Enumeration Method, Amendment 1 :
	Listeria monocytogenes	Modification of enumeration Medium
	Listeria monocytogenes	Method No: MOH (1)
	Boric Acid	E03-003 The Determination of
	Water soluble synthetic food	Water Soluble Synthetic Food
	colour (see Appendix |)	Colour in Food by Paper
	colour (see Appendix |)	Chromatography and UV/ V15
	colour (see Appendix |)	spectrophotometer
	colour (see Appendix |)	In -" House Method, Ref. No. MOH
	Total Plate Count (TPC)	FDA Food and Drug =
	Determination of Boric acid in Food	FQL-TM-FA205 In-House Method
	by UV-Vis Spectrophotometer	based International Food on
	by UV-Vis Spectrophotometer	Research Journal 17: 1107-1112
	by UV-Vis Spectrophotometer	(2010)
	Total Plate Count in Food by	AOAC Official Method 990.12
	using 3M Petrifilm Aerobic Count	None
	Plate	None
	Enumeration of Escherichia Coli	AOAC Official Method 991.14
	in Food by using 3M Petrifilm	None
	Escherichia Coli/Coliform Count	None
	Plates	None
	Enumeration of Coliform in Food	AOAC Official Method 991.14
	by using 3M Petrifilm Escherichia	None
	Coli/Coliform Count Plates	None
	Enumeration of Staphylococcus	AOAC Official Method 2003.07
	Aureus in Food by using 3M	None
	Petrifilm Staph Express Count	None
	Plates	None
	Detection of Bacillus Cereus in	Compact Dry -œNissui-• Bacillus
	Food	Cereus
	Detection of Salmonella in Food	Bacteriological Analytical Manual,
	Detection of Salmonella in Food	Chapter 5, Salmonella
	Detection of Salmonella in Food	AOAC Official Method of Analysis

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	by using 3M Petrifilm Salmonella	2014.1
	Express System	None
	Salmonella spp.	ISO 6579-1:2017
	Analysis of OrganophosphorusMethod: AOAC 2007.01 Analysis of Organophosphorus	Analysis of Organophosphorus
	Total Plate Count (TPC)	FDA Food and Drug =
	Aerobic Plate Count	AOAC Official Method 990.12 Aerobic
	Bacillus cereus	ISO 7932:2004 (E) Microbiology of Food
	Yeast and Mold	AOAC Official Method 2014.05
	Enumeration of	MOH Based on AOAC
	Enumeration of Mesophilic	MOH MMEF Part 4 Section
	Campylobacter spp	MOH (1): ISO 10272-
	Gram Negative Pathogens	In-house Method, Ref. No. MOH RO3-
	Boric Acid	In-house Method, Ref. No. MOH
	Water Soluble Colours	In-house Method, Ref. No. MOH
	Moisture	In-house Method Ref. No. MOH J03-
	Ash	MOH Determination Of Ash
	1) Antimoni	MOH The Determination of
	Water Activity	In-House Method MOH J03-049:
	Soluble Solid	In-House Method MOH J03-018:
	Mercury	In-House Method MOH H03-015:
	Acrylamide	In-House Method MOH NO3-015:
Food Dairy Products E	Fatty Acid Composition:	None
Food E Non-alcoholic Beverage Coffee And Coffee Products E Tea And Tea Products	Caffeine	In-house method, WI-TEC-M013, based on African Journal of Food Science Vol. 4(6), 2010 page 353 -” 358
Industrial Effluent E Water	None	Edition 2012
Material And Articles In E	Overall Migration into Food	None
	Overall Migration into Food	None
	Specific Migration into Aqueous	None
Medical Devices	Estimation of Product Bioburden	None
	Endotoxin	Test for Bacterial Endotoxin, BP
Mineral Water	None	None
	Hexavalent Chromium	APHA 3500 Cr B, Edition
	Chloride	APHA 4500-Cl B, Edition
	Fluoride as F	Ion Chromatography with Chemical
	None	None
	(Monochloramine and	None
	None	None
	None	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Alkalinity	APHA 2320 B, 2017
	Free Carbon Dioxide	APHA 4500-COz C, 2017
	Sodium (Na)	APHA 3120 B 2017
	None	None
	None	None
	Dieldrin	None
	None	None
	None	None
	None	None
	None	None
	Aluminum as Al	None
Mineral Water E	None	None
	None	None
	Aldrin Dieldrin	None
Non-alcoholic	None	2012
Nut, Fruits And Vegetables	None	None
Personal Care E Household Products E	e Arsenic, As e Mercury, Hg	ASEAN Cosmetic Method (ACM) 005 (Revision 3, May 2013)
Potable & Domestic Water E	None	None
Products Meat, Poultry And Derived Products	Arsenic, Mercury	In-house method, WI-TEC-M022, based on AOAC 977.15, 19" Edition 2012
River Water E	None	None
	Paraquat	In House Method 0598 based on
Sauces, Herbs, Spices	None	2012
	None	None
	Cholesterol	None
Sauces, Herbs, Spices And	None	None
	None	Detection using OPA
	None	None
	None	column and UV detection
	None	None
	None	None
	None	None
	None	None
Sewage E Potable & Domestic Water E River Water E E Underground Water	Ammoniacal Nitrogen	APHA 4500-NH3 B&C, Edition (2012)
Sewage E River Water	None	None
Sewage Water E	None	None
	Turbidity	APHA 2130 B, 2005 APHA 2130 B, 2017
	None	APHA 4500-F- C, 2017
	pH Value	APHA 4500-H+ B, 2005 APHA 4500-H+ B, 2017
Sewage Water E River Water	None	based on APHA 5520 B, Edition 2012
Sugar And Sugar Products E	None	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Sugar And Sugar Products Nut, Fruits And	Vitamin C (Ascorbic acid)	In-house method, based on HPLC with HILIC column and UV detection
Surface (swab)	None	Compendium of Methods for the
Tap Water Underground Water	pH	APHA 4500H* B, 22" Edition 2012
Underground Water E	None	None
Urine E Urine	2,5-Hexanedione	In-house method, WI-TEC-M058, based on NMAM 8318:2017, US
Vegetables And Derived	None	None
Vegetables And Derived Products	Element (Al, Ca, Cd, Cu, Pb, Na, Sn, Sb, Fe, Zn)	In-house method, WI-TEC-M010, based on AOAC 985.01,19" Edition 2012
Water	None	None
	Metals by ICP	None
	None	None
	None	None
	None	None
	None	None
	None	None
	pH	ASTM D 1293-2005 (Method B) APHA 4500 H* B 2005/2017
	pH	ASTM D1293-2005 (Method B) APHA 4500 H* B 2005/2017
	None	None
	Turbidity	APHA 2130B
	On-site Sampling & Testing (pH Temperature, Turbidity)	In-house Method SOP-0222-2001 & SOP-0222-2003
	Coliform	APHA 9221 B, Edition, 2005
	Heterotrophic plate count in	APHA Method 9215 D, Edition,
	None	None
	None	None
	pH Value	BS 1377-3 : 2018 Clause 12
	pH Value	BS 1377-3 : 2018 Clause 12
	None	None
	Calcium Hardness as CaCO3,	APHA 3500-Ca B, 2017
	Magnesium (by Calculation Method)	APHA 3500-Mg B, 2017
	Nitrate	APHA E, 2017
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	None
	Aluminium	None
	None	None
	Organochlorine Pesticide	APHA 6630 B, Edition
	Ammoniacal Nitrogen	APHA F, 24" Edition
	Arsenic	APHA 3125 B, Edition
	Mercury	In-house method, SGS-TM-ENVI-003, based on APHA 3125 B
	2,4-dichlorophenoxyacetic acid (2,4-D)	In-house method, SGS-TM-02-045, based on Agilent Application Note 5991-5731 EN (LCMSMS)
	Heavy Metals by ICP-MS	None
	Endotoxin	Test for Bacterial Endotoxin, BP 2022
	pH	APHA 4500 H*B
	Oil & Grease	APHA 5520 B
	Color	APHA 2120 B
	Color	APHA 2120 F
	pH	APHA 4500 H* B
	Turbidity	APHA 2130 B
	Conductivity	APHA 2510 B
	None	None
	None	None
	None	None
	Escherichia coli and coliform	ISO 9308-1: 2014 (E) / Enumeration
	Pseudomonas aeruginosa	ISO 16266:2006 (E) / Detection and
	Ammonium nitrogen	BS 6068: Section 2.7:1984 ISO 5664:1984
	Chemical Oxygen Demand	BS 6068: Section 2.34:1988
	Suspended solids	BS 2690-Part 120:1981
	Dissolved solids	BS 2690-Part 121:1981
	None	ASTM D 523-82
	COD	APHA 5220 D
	None	None
	Free Chlorine	APHA' 4500 -" CI G
	Count	(Pour Plate, Spread Plate and
	Anaerobes (Clostridia)	BS 6068-4:9: 1993
	Gross Alpha & Gross Beta	None
	Arsenic as As	None
	Antimony as Sb	None
	Aluminium as Al	None
	Beryllium as Be	None
	Cadmium as Cd	None
	Chromium as Cr	None
	Lead as Pb	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Silver as Ag	None
	Selenium as Se	None
	Thallium as TI	None
	Mercury as Hg	In-house Method LWI-MWE 037 based on APHA 3112 B by
	Mercury as Hg	Mercury Analyser
	Nitrate	In-house Method LWI-MWE 032 based on HACH Nitrate
	Nitrate	Test Comparator
	Sulfide	HACH Method 8131
	Chlorine, Free Residual	In-house Method LWI-MWE
	Chlorine, Free Residual	034 based on DPD-Palintest
	Chlorine, Free Residual	Test Comparator
	Total Chlorine	In-house Method LWI-MWE
	Total Chlorine	035 based on DPD-Palintest
	Total Chlorine	Test Comparator
	Colour (ADMI)	APHA 2120 F
	Heterotrophic Plate Count	None
	Pseudomonas aeruginosa	In-house Method LWI-MME (APHA) 007
	Pseudomonas aeruginosa	based on APHA 9213 E, 2020
	Escherichia coli and Coliform	Escherichia coli and Coliform Bacteria. Part 1: Membrane filtration
	Escherichia coli and Coliform	method
	Escherichia coli and Coliform	Method No: MOH (1)
	Escherichia coli and Coliform	ISO 29981 : 2010 (E), IDF 220 :
	Escherichia coli and Coliform	2010 (E) Milk Products -
	None	None
	None	None
	None	None
	None	None
Water E Deionized Water	Anions	None
Water E Potable & Domestic Water	Metals by ICP e Aluminium	None
Water River Water	None	None

SCOPE OF TESTING : CHEMICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques

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SCOPE OF TESTING : CHEMICAL (INDUSTRIAL HYGIENE)

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques

SCOPE OF TESTING : MICROBIOLOGY

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques