Issue date: 26 March 2025
Valid Until: -

NO: SAMM 334

LABORATORY LOCATION/ CENTRAL OFFICE:	Makmal Keselamatan dan Kualiti Makanan Miri Lot 523, Blok 17, Jalan Pujut-Padang Kerbau, 98000 Miri, Sarawak , 98000, SARAWAK MALAYSIA
ACCREDITED SINCE :	26 MARCH 2025
FIELD(S) OF TESTING:	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:	Makmal Keselamatan dan Kualiti Makanan Miri Lot 523, Blok 17, Jalan Pujut-Padang Kerbau, 98000 Miri, Sarawak , 98000, Sarawak
FIELD(S) OF TESTING :	MICROBIOLOGICAL,

SCOPE OF TESTING : MICROBIOLOGY

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
Food	Detection of Salmonella sp.	SO 6579:2002 (E)
	Detection of E. coli 0157	SO 16654:2001 (E)
	Enumeration of Coagulase Positive	SO 6888-1:1999 Amd.1:2003
	cholerae and Vibrio vulnificus	None
	Horizontal Method for the	None
	Benzoic acid Sorbic acid	E03-002, Based on JAOAC Vol. 70, No. 5, 892-896
	Water Soluble Synthetic Food Colour	In-House Method, Ref. No. MOH E03-003, Based on JAOAC (1975). Official Method of Analysis. 12"

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Methyl paraben Ethyl paraben Propyl paraben Butyl paraben	In-House Method, Ref. No. MOH E03-019. Based on Food Chemistry 82. (2003). 469
	Saccharin and Cyclamate	on JAOAC, vol 71, no 5, 1988, p 934
	Listeria monocytogenes	Method No.: MOH K03-113(1)
	Benzoic Acid and Sorbic Acid	In-house Method No.: MOH E03-002,
	Aerobic Count	AOAC Official Method 990.12 Aerobic Count Plates In Foods
	i) E.coli Count ii) Coliform Count	AOAC Official Method 991.14 Coliform And Escherichia coli Count In Foods
	None	AOAC Official Method 2003.07
	None	Microbiology of Food and Animal
	Listeria monocytogenes	MOH
	Listeria monocytogenes and Listeria spp.	ISO 11290-1:2017 (E) Microbiology of the food chain - Horizontal method for the detection and
	Water Soluble Synthetic Food	In-House Method MOH E03-003 : The
	Total Coliform Count	AS 5013.9 (2009)
	Standard Plate Count	AS 5013.1 (2004)
	Aerobic Plate Count	FDA, Chapter 3, Jan 01
	Total E.Coli Count	AS 5013.9 (2009)
	Total Yeast & Mould Count	AS 5013.29 (2009)
	None	Application Notes, LC-MS/MS
	None	Application Notes, LC-MS/MS
	Staphylococcus aureus count (coagulase positive)	FDA Chapter 12 (Detection and Enumeration)
	Yeast Count	AOAC 997.02 (Petrifilm)
	Peroxide Value	In House Test Method, TM 006,
	None	None
	None	None
	Ash	AOAC 945.46
	Carbohydrate	In-house method TM-FD-006:
	Calories (by calculation)	In-house method TM-FD-009 based
	None	None
	Bacterial identification up to species level (Refer to Appendix A(i) & A(ii))	BD BBL Crystal Identification Gram Positive ID Kit & Gram Negative ID Kit (Enteric / Non Fermenter ID Kit) LWI
	Synthetic Colouring	In-house Method, CL/FD/017, based

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Water Activity	In-house Method, CL/FD/017 based on Decagon Paw Kit Water Activity Meter Manual
	Crustacean	n-house Method NA/FD/016 using Real-Time PCR
	Moisture	n-house Method
	Leaching procedure for:	None
	None	None
	Trace Metal Analysis	None
	Salmonella Detection	FDA BAM Chapter 5
	None	None
	Campylobacter jejuni and C. coli	In-house method Detection of
	1) Ash Content in Food Products	In House Method
	Fat (Total, Saturated &	In-house method
	Aerobic Plate Count	FDA -” BAM Chapter 3, 2001
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	Protein	In-house Method: CA/R/007, Based on
	Total Dietary Fiber	In-house Method WI/JC-LAB/029
	Enumeration of	None
	Aerobic Plate Count	FDA BAM Chapter 3, 2001
	Staphylococcus aureus	AOAC Official Methods of Analysis
	None	None
	Antimony	In House Method TM/F-001 refer to
	None	None
	Alcohol (ethanol)	In-house Method No: JAKIM /
	Alcohol (ethanol)	In-house Method No: JAKIM /
	Salmonella spp.	AOAC OMA 2016.01 (3M-„¢ Molecular
	None	Based on Porcine Trace ® Rapid
	None	None
	None	None
	None	None
	Determination of Cholesterol in	JKM F 1208: In-house based on
	Total Acidity in Food by Titration	JKM F 0935 In-house Method based
	Determination of Melamine in	JKM F 1302 In-house Method based

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Determination of Total Arsenic in	JKM F 0509 In-house Method based
	Net Weight	JKM F 0944 In-house Method based
	Determination of Vitamin C	In-house method JKM F 1211 based
	Determination of Vitamin A	In-house method JKM F 1212 based
	Determination of Water Activity	JKM M 3082
	Yeast and Mould	JKM M 3084 -" Enumeration of Yeast
	Detection and Enumeration of	JKM B 0201
	Coliform Counts (Petrifilm)	JKM M 3053 AOAC, 21* Edition, 2019 (991.14) -"
	Detection of Cronobacter	JKM M 3083
	Extraction of Food Samples	JKM B 0105 DNA Extraction and
	Sequencing of mitochondrial	JKM B 0310 Speciation of animal
	Foreign Matter and Extraneous	JKM B 0405 Determination of
	Identification of Insects/Foreign	JKM B 0404. Determination of
	Identification of Foreign Matter in	JKM B 0402. Identification of Rodent
	Determination of the Origin of	JKM B 0403. Determination of Origin
	None	None
	None	None
	None	None
	None	None
	None	None
	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

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

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

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

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

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	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 And Environment	Enumeration of Coliform -" MPN Technique	ISO 4831 : 2006 (E)
	Enumeration of E.coli - MPN Technique	ISO 7251: 2005 (E)
Frozen Fish, Meat,	1.Surface Spread Plate Method	None
Meat, Poultry And Seafood, Processed Food	S. Aureus Express Count Plate	AOAC Official Method 2003.07 (Petrifilm)
Milk Products	Enumeration of Presumptive	None
	None	2000.08:2010
	None	None
	None	None
	Presumptive Bifidobacteria	Enumeration of Presumptive Bifidobacteria colony count =
	Presumptive Bifidobacteria	technique at 37°C
	Presumptive Bifidobacteria	Method No: MOH K03-133
Perishable Samples /	Enumeration of Mesophilic aerobes	Section 1 Part 4 of *MMEF
Perishable Samples / Ready-	E.Coli/Coliform Count Plates	AOAC Official Method 991.14
Poultry And Seafood, Processed Food	None	None
Ready-to-eat Food,	(Total Plate Count)	None
To-eat Food, Frozen Fish,	None	(Petrifilm)
Water	the Spores of Sulfite-Reducing Anaerobes (Clostridia) -" Part 2:	ISO 6461/2-1986 (E)
	E. Coli and Coliform	Water Quality-Enumeration of E.coli
	Intestinal enterococci	MOH (2)
	None	None
	None	None
	Coliform Count	APHA 9221 B
	E.Coli Count	APHA 9221 B, 9225
	Total Aerobic Plate Count	APHA 9215 B
	Total Fecal Coliform Count	APHA 9221 E
	Heterotrophic Plate Count	AS/NZS 4276.3.1 (2007)
	pH	APHA 4500 - H* B, 21% Edition
	Chlorine - Free	HACH 8021 and HACH 10069,
	Fluoride	APHA-4110 B, 215 Edition
	Biological Oxygen Demand, 5	APHA-5210 B, 215 Edition
	Free Chlorine MR	HACH method 10245, 5'* Edition,
	Heterotrophic Colony Count	AS 4276.3.1-1995

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Zinc Manganese	APHA 3030E, 3120B Edition 2012
	None	None
	None	None
	Determination of Organochlorine	None
	Bacillus cereus	In-house method 21BAMC-B036
	None	None
	Pseudomonas aeruginosa	In-house method 21BAMC-B064
	Total Coliforms	In-house method 21BMPN-B075
	Bacillus cereus	In-house method 21BAMC-B036
	Pseudomonas aeruginosa	In-house method 21BAMC-B064
	Total Coliforms	In-house method
	None	PCL)
	Acute Hepatopancreatic	In-house method SD?QC-WI-305 :
	None	None
	Pathogen	, , , APHA 9222A,
	None	None
	Temperature	APHA 2550 B
	Phosphorus	APHA 4500 P C
	Bromodichloromethane,	In-house Method, CL/WT/008 based
	Metals by ICP	APHA 3120 B
	Mercury	APHA 3112 B
	Chlorpyrifos	In-house Method, CL/WT/011,
	Aluminium	APHA 3125 B (ICP-MS)
	Gross Alpha, Gross Beta	ISO 11704:2018
	Heterotrophic Plate Count	APHA 9215 B (Pour Plate Method)
	pH	APHA - 4500-H B
	None	ASTM D 1293-18
	None	None
	None	None
	None	ASTM D 1293-18
	None	None
	Turbidity	APHA 2130 B
	pH	APHA 4500 H* B 23rd Edition
	Total solid dried at 103°C -” 105 °C	APHA 2540 B (2005)
	Enumeration of Plankton	Marine Water (PBPKL-STP-PP-1)
	None	APHA 4500 Norg B (2017) and
	None	USP Chapter Bacterial
	Coliform, Fecal Coliform &	APHA 9222 B.G.H.D
	None	APHA 3111 B, 2017
	None	APHA 3111 B, 2017
	None	None
	None	from HACH Method 8023, DR3900
	PH test	APHA 4500 H*B Edition 2017)
	Total suspended solids	APHA 2540 D Edition 2017)
	Turbidity Test	APHA 2130 B Edition 2017)
	None	None

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	MLSS	None
	Hydrocarbon, PAH	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	Selenium (Se) Chromium (Cr)	None
	None	None
	None	None
	None	None
	None	None
	None	None
	Ammonical Nitrogen	APHA 4500-NH3
	None	None
	Lead	APHA 3120 B
	Tin	None
	Iron	None
	Heterotropic plate count	APHA 9215 D
	Standard total coliform	APHA 9222 B
	None	None
	None	None
	pH	APHA - B
	Escherichia coli and Coliform	ISO 9308-1:2014 (E) / Enumeration by
	Bisphenol A	In-house test method MKA TMO6 based
	Total Hardness	HACH Method 8226, 8" Edition, 2015
	Hardness by Calculation	APHA 2340 B & In-house test method
	Color	HACH Method 8025, Edition, 2014
	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
	None	None
	Determination of pH	APHA 4500-H* B, 2005
	Determination of chloride	APHA 4500-CI B, 2005
	Determination of sulphate	APHA B, 2005
	Determination of alkalinity	APHA 2320 B, 2005
	Determination of total solids	APHA 2540 B, 2005
	pH	APHA 4500 H*B
	Color	APHA 2120 C (2017)
	Heterotrophic Plate Count	APHA 9215 B (2017
	Standard Total Coliform	APHA 9221 B (2017
	Escherichia coli	APHA 9221 F (2017)
	Examination for Legionella spp.	AS/NZS 3896:2008
	pneumophila	None
	Staphylococcus aureus count	APHA 9213 B (2017)
	Fecal Streptococcus	APHA 9230 C (2017)
	Pseudomonas aeruginosa	APHA 9213 F (2017)
	Identification of Escherichia coli	In-house Method GPS/QA/TM/001
	Identification of Shiga-toxigenic	In-house Method GPS/QA/TM/004
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	None	None
	Ammonia	ASTM D1293
	None	None
	None	None
	None	None
	and Escherichia coli	None
	None	filtration)
	Clostridium perfringens	ISO 14189: 2013 (E)
	None	None
	None	None
	None	None
	None	(2005)
	None	21% Edition (2005)
	Colour	APHA 2120 C 2005
	Determination of Volatile	Method EPA 524.2 By Purge & Trap
	Oxygen Demand (COD) for High	APHA Method 5220D
	None	In-house Method JKM W 0502,

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	None	on APHA 4110 B-"lon
	Colony Count at 36°C	JKM M 2038, ISO 6222:1999 (E)
	Intestinal Enterococci	i) WI 16 -" Sample Preparation for
	Enumeration of Clostridium	JKM M 2035
	Detection of pathogenic	JKM B 0201 Detection of pathogenic
	Identification and Quantification	JKM B 0406
	pH	APHA - 4500-H B
	None	None
	None	None
	None	None
	None	None
	Boron	HACH METHOD 8015
	None	None
	E. coli	APHA 9221 F (MPN Method)
	None	None
	Total Organic Carbon	APHA 5310 C
	Heterotropic plate count	APHA 9215 B, 22"4 Edition (2012)
	None	(Membrane Filtration Technique)
	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

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

Issue date: 26 March 2025
Valid Until: -

NO: SAMM 334

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	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 Tl	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
Yogurt	Identification of Char.	None
	None	None
	None	None