

NO: SMM 877

Page: 1 of 6

LABORATORY LOCATION:  
(PERMANENT LABORATORY)
**BIO SYNERGY LABORATORIES SDN. BHD,  
NO. 7, JALAN MUTIARA EMAS 6/1A,  
TAMAN MOUNT AUSTIN,  
81100 JOHOR BAHRU, JOHOR  
MALAYSIA**
**FIELDS OF TESTING: CHEMICAL & MICROBIOLOGY**

This laboratory has demonstrated its technical competence to operate in accordance with MS ISO/IEC 17025:2005 (ISO/IEC 17025:2005).

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
<b>General Foodstuff:</b> <ul style="list-style-type: none"> <li>• Beverages</li> <li>• Flour &amp; Confectionery</li> <li>• Grain, Beans &amp; Cereal Products</li> <li>• Food Additives</li> <li>• Frozen Food</li> <li>• Seafood</li> <li>• Fruit &amp; Vegetables &amp; derived products, etc</li> </ul>	Energy/Calories	Method of Analysis for Nutrition Labeling, 1993 & Food Regulation 1985
	Total Carbohydrate	Method of Analysis for Nutrition Labeling, 1993 & Food Regulation 1985
	Protein	In-house Method, CJ/FD/001, Based on AOAC 2001.11
	Total Fat	In-house Method, CJ/FD/002, Based on Pearson's Chemical Analysis of Foods, 8 <sup>th</sup> Ed, 1990. Pg. 22
	Ash	In-house Method, CJ/FD/005, Based on MS ISO 5984:1996 (Confirmed 2003)
	Moisture	In-house Method, CJ/FD/006, Based on MS ISO 6496:2003 (Confirmed 2011)

NO: SAMM 877

Page: 2 of 6

**SCOPE OF TESTING: CHEMICAL**

<b>Materials/ Products Tested</b>	<b>Type of Test/ Properties Measured/ Range of Measurement</b>	<b>Standard Test Methods/ Equipment/Techniques</b>
<b>Food Products:</b> <ul style="list-style-type: none"> <li>• Beverages</li> <li>• Flour &amp; Confectionery</li> <li>• Edible Fats &amp; Oils</li> <li>• Food Additives</li> <li>• Frozen Food</li> <li>• Seafood</li> <li>• Fruit &amp; Vegetables &amp; derived products</li> <li>• Animal Feeds</li> </ul>	Metals/Minerals <ul style="list-style-type: none"> <li>• Antimony</li> <li>• Arsenic</li> <li>• Cadmium</li> <li>• Copper</li> <li>• Lead</li> <li>• Tin</li> </ul> Mercury	In-house Method, CJ/FD/003, Based on AOAC 999.11          In-house Method, CJ/FD/004, Based on AOAC 971.21, Using Flow Injection Mercury System (FIMS)

**Signatories:**

- |                                    |   |
|------------------------------------|---|
| 1. Siti Nabihah Binti Shamsudin    | IKM No.: L/7597/7705/17                   |
| 2. Junaitun Alfarahim Binti Jaafar | MJMM0158                                  |
| 3. Khoo Hwa Chuan                  | IKM No.: M/2212/4433/03/05 (Non-Resident) |

NO: SAMM 877

Page: 3 of 6

## SCOPE OF TESTING: CHEMICAL

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
<b>Feed</b>	Energy/Calories	Method of Analysis for Nutrition Labeling, 1993 & Food Regulation 1985
	Total Carbohydrate	Method of Analysis for Nutrition Labeling, 1993 & Food Regulation 1985
	Protein	AOAC 2001.11
	Crude Fat	MS 1416:1997
	Crude Ash	MS ISO 5984:1996 (Confirmed 2003)
	Moisture	MS ISO 6496:2003 (Confirmed 2011)
	Crude Fiber	AOAC 962.09
<b>Water</b> <ul style="list-style-type: none"> <li>• Portable &amp; Domestic</li> <li>• Industrial Water</li> <li>• Distilled Demineralized</li> <li>• Reverse Osmosis</li> <li>• Ultrapure Water</li> <li>• Swimming Pool Water</li> <li>• Cooling Tower Water</li> <li>• Boiler Water</li> <li>• Surface Water</li> <li>• Mineral Water</li> <li>• Industrial Effluent, etc</li> </ul>	pH	APHA 4500 H*B
	Total Suspended Solid	APHA 2540 D
	Oil and grease	APHA 5520 B
	Color	APHA 2120 F
	Chemical Oxygen Demand	APHA 5220 D
	Biochemical Oxygen Demand	APHA 5210 B & 4500 O G
Palm Oil & Palm Oil Products	Moisture & Volatile Matter	MPOB p2.1 Part 1:2004
	Impurities	MPOB p2.2:2004
	Peroxide Value	MPOB p2.3:2004
	Acidity/FFA	MPOB p2.5:2004
	Iodine Value	MPOB p3.2:2004
	Colour Lovibond	MPOB p4.1 Part 1:2004
	Slip Melting Point	MPOB p4.2:2004

Scan this QR Code or visit [www.ism.gov.my/cab-directories](http://www.ism.gov.my/cab-directories) for the current scope of accreditation

NO: SAMM 877

Page: 4 of 6

**SCOPE OF TESTING: CHEMICAL**

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Petroleum Product	Standard Test Method for Oxidation Stability of Steam Turbine Oils by Rotating Pressure Vessels	ASTM D 2272-11
	Standard Test Method for Acid Number of Petroleum Products by Potentiometric Titration	ASTM D 664-07
	Standard Test Method for Determination of Water in Petroleum Products, Lubricating Oils and Additives by Coulometric Karl Fischer Titration	ASTM D 6304-04a

APHA : American Public Health Association, Standard Method for Examination of Water and Wastewater, 22nd Edition, 2012.

ASTM: American Society for Testing and Material

AOAC : Association of Official Analytical Chemists

MS: Malaysian Standard

MPOB:Malaysian Palm Oil Board

**Signatories:**

1. **Siti Nabihah Binti Shamsudin**
2. **Khoo Hwa Chuan**

**IKM No.: L/7597/7705/17**

**IKM No.: M/2212/4433/03/05 (Non-Resident)**

NO: SAMM 877

Page: 5 of 6

## SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
<b>Food Products/Feed</b> <ul style="list-style-type: none"> <li>• Beverages</li> <li>• Edible Fats &amp; Oils</li> <li>• Frozen Food</li> <li>• Seafood</li> <li>• Sauces</li> <li>• Fruit Drink &amp; Juice</li> <li>• Flour &amp; Confectionery</li> <li>• Dairy Products</li> <li>• Food Additives</li> <li>• Animal Feed</li> </ul>	Aerobic Plate Counts (cfu/g)	AOAC 990.12 / FDA-BAM, Chapter 3
	Yeast and Mould Counts (cfu/g)	AOAC 2014.05 / FDA-BAM, Chapter 18
	<i>E. coli</i> / Coliform Count (cfu/g)	AOAC 998.08 & 991.14 / FDA-BAM, Chapter 4
	<i>Staphylococcus aureus</i> (cfu/g)	AOAC 2003.11 / FDA-BAM, Chapter 12
	<i>Salmonella</i> (Detection)	AOAC 2014.01 / FDA-BAM, Chapter 5
	<i>Salmonella</i> (Detection) (GDS)	AOAC 2009.03
	<i>Cronobacter (Enterobacter sakazakii)</i> (Detection) (GDS)	In-house Method, MJ/FD/001, Based on FDA-BAM Chapter 29, Using Genetic Detection System (GDS)
	Enterobacteriaceae	AOAC 2003.01
	<i>Vibrio parahaemolyticus</i> (Detection)	ISO/TS 21872-1:2007 (E)
	<i>Vibrio cholerae</i> (Detection)	ISO/TS 21872-1:2007 (E)
<i>Listeria monocytogenes</i>	ISO 11290-1:1996/Amd 1:2004 (E)	
Effluent, Water	Heterotropic Plate Count - Pour Plate (cfu/ml) - Membrane Filtration (cfu/100ml)	APHA 9215 B APHA 9215 D
	Coliform (cfu/100ml)	APHA 9222 B
	Coliform (MPN/100ml)	APHA 9222 B
	<i>E. coli</i> (cfu/100ml)	APHA 9222 G
	<i>E. coli</i> (MPN/100ml)	APHA 9221 F

Scan this QR Code or visit [www.ism.gov.my/cab-directories](http://www.ism.gov.my/cab-directories) for the current scope of accreditation

NO: SAMM 877

Page: 6 of 6

## SCOPE OF TESTING: MICROBIOLOGY

Materials/ Products Tested	Type of Test/ Properties Measured/ Range of Measurement	Standard Test Methods/ Equipment/Techniques
Pharmaceutical Products, Food Supplement (Traditional Medicine), Cosmetic Products	Total Microbial Aerobic Count	BP 2013, Appendix XVI B
	Total Combined Yeast & Mould Count	BP 2013, Appendix XVI B
	Bile tolerant Gram Negative Bacteria	BP 2013, Appendix XVI B
	<i>Escherichia coli</i>	BP 2013, Appendix XVI B
	Salmonella	BP 2013, Appendix XVI B
	<i>Staphylococcus aureus</i>	BP 2013, Appendix XVI B
	<i>Pseudomonas aeruginosa</i>	BP 2013, Appendix XVI B
	<i>Clostridia spp</i>	BP 2013, Appendix XVI B
	<i>Candida albican</i>	BP 2013, Appendix XVI B
	Bile tolerant Gram Negative Bacteria	BP 2013, Appendix XVI F
Escherichia coli	BP 2013, Appendix XVI F	
Salmonella	BP 2013, Appendix XVI F	
Air (Environment Air Sampling)	Settle Plate Test	Compendium of Methods for Microbiological Examination of Foods, Chapter 3, 4 <sup>th</sup> Ed. (2001)
Surface, Equipment & Personnel Hand	Swab Test	Compendium of Methods for Microbiological Examination of Foods, Chapter 3, 4 <sup>th</sup> Ed. (2001)

APHA : American Public Health Association, Standard Method for Examination of Water and Wastewater, 22nd Edition, 2012.

BP : British Pharmacopeia, 2013 Vol. V.

ISO/TS : International Organization of Standardization/Technical Specification

FDA-BAM : Food & Drug Administration-Bacteriological Analytical Manual

AOAC : Association of Official Analytical Chemists

## Signatories:

1. Agnes Gan See Theng
2. Lim Jun Han

**MJMM0516**  
**MJMM0517**