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LABORATORY LOCATION/ CENTRAL OFFICE:	Industrial Biotechnology Research Centre (IBRC), SIRIM Block 19, SIRIM Berhad No. 1, Persiaran Dato' Menteri Section 2, P.O Box 7035 , 40700, SELANGOR MALAYSIA
ACCREDITED SINCE :	28 JULY 2025
FIELD(S) OF TESTING:	CHEMICAL MICROBIOLOGICAL TOXICITY

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:	Industrial Biotechnology Research Centre (IBRC), SIRIM Block 19, SIRIM Berhad No. 1, Persiaran Dato' Menteri Section 2, P.O Box 7035 , 40700, Selangor
FIELD(S) OF TESTING :	CHEMICAL, MICROBIOLOGICAL, TOXICITY

SCOPE OF TESTING : CHEMICAL

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
Analytical Laboratory Dry Powder, Slurry, Emulsion Or Dilute Suspension (food Powder, Minerals, Yogurt, Carbon Powder, Cleaning Solution For Contact Lens, Clay Material, Cosmetic Raw Material In Powder Form)	Particle Size Distribution	LWI-238-09 In-house method Particle Size Distribution based on Laser Diffraction Technique (Particle Size Laser Analyzer Coulter LS 100Q)

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Eurycoma Longifolia (tongkat Ali) Herbal Extract	Chemical marker eurycomanone	SIRIM/MOA 4-11:2019 Annex A Detection of eurycomanone in tongkat ali (Eurycoma longifolia Jack) spray dried aqueous using high-performance liquid chromatography (HPLC)
Zingiber Officinale Roscoe (ginger) Herbal Extract	Chemical marker 6-gingerol and 6-shogaol	SIRIM/MOA 4-3:2019 Annex A Detection of 6-gingerol and 6-shogaol in halia (Zingiber officinale Roscoe) spray dried aqueous using high-performance liquid chromatography (HPLC)
Ficus Deltoidea (mas Cotek) Herbal Extract	Chemical marker isovitexin and vitexin	SIRIM/MOA 4-6:2019 Annex A Detection of isovitexin and vitexin in mas cotek (Ficus deltoidea Jack var. kunstleri (King) Corner) spray dried aqueous using highperformance liquid chromatography (HPLC)
Labisia Pumila (kacip Fatimah) Herbal Extract	Chemical marker gallic acid	SIRIM/MOA 4-5:2019 Annex A Detection of gallic acid in kacip fatimah (Marantodes pumilum (Blume) Kuntze syn Labisia pumila (Blume) Fern.-Vill.) spray dried aqueous using high-performance liquid chromatography (HPLC)
Hibiscus Sabdariffa Linn (calyx Roselle) Herbal Extract	Chemical marker delphindin-3-Sambubioside	SIRIM/MOA 4-10:2019 Annex A Detection of delphinidin-3-sambubioside chloride in roselle (Hibiscus sabdariffa L.) spray dried aqueous using high-performance liquid chromatography (HPLC)
Herbal Extract	Biochemical Antioxidant Assay (DPPH Assay)	LWI-238-34 based on SIRIM/MOA 3:2017 Annex H page 43-48: Determination of antioxidant free radical scavenging activity (DPPH assay) and Food Chemistry 113 (2009) 1154-1159
	Biochemical Antioxidant Assay (ABTS Assay)	LWI-238-35 based on SIRIM/MOA 3:2017 Annex G page 37-42: Determination of antioxidant free radical scavenging activity (ABTS assay) and Food Chemistry 113 (2009) 1154-1159
Cosmetic Skin Care	Hydroquinone	ACM 003 Identification and determination of hydroquinone in cosmetic products by TLC and HPLC

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
Birdnest	Sialic acid	LWI-238-53-6 Determination of sialic acid from edible bird's nest using HPLC
Gloves, Protective Clothing And Footwear Materials	Determination of Material Resistance to Permeation by Chemicals, Part 1: Permeation by Potentially Hazardous Liquid Chemicals Under Conditions of Continuous Contact. Challenge chemicals: 1) Sodium hydroxide 2) Sulphuric acid 3) Nitric acid 4) Acetic acid 5) Ammonia solution (Ammonium hydroxide) 6) Hydrofluoric acid 7) Potassium Hydroxide 8) Hydrogen peroxide 9) Formaldehyde 10) Methanol 11) Acetone 12) Acetonitrile 13) Dichloromethane 14) Toluene 15) Diethyl amine 16) Tetrahydrofuran 17) Ethyl acetate 18) n- Heptane 19) Isopropanol	1)BS EN 16523-1:2015+A1:2018 Determination of Material Resistance to Permeation by Chemicals, Part 1: Permeation by Potentially Hazardous Liquid Chemicals Under Conditions of Continuous Contact.
Pharmaceuticals And Traditional Medicine Products In The Form Of Capsules And Tablets.	Uniformity of weight for capsules and tablets	1. USP 41 <2091>:2021 Weight Variation of Dietary Suppplements.
	Disintegration test	1. USP 41 <701>: 2021 Disintegration and Dissolution of Dietary Supplements (Uncoated tablets, plain coated tablets, buccal tablets, sublingual tablets, hard gelatin and soft gelatin capsules)
Traditional Health Supplement And Traditional Medicine	Adulteration of dietary supplements with drugs and drug analogs Sexual Enhancement/ Erectile Dysfunction (ED) (Screening) 1. Sildenafil 2. Vardenafil 3. Tadalafil	In-house Method LWI-238-54-01 based on the United States Pharmacopeia (USP 41) <2251>:2020 Screening for undeclared Drugs and Drug Analogues.

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
	Adulteration of Dietary Supplements with Drugs and Drug Analogs Corticosteroids Drugs (Screening) 1. Betamethasone 2. Dexamethasone 3. Prednisone 4. Triamcinolone 5. Cortisone Acetate 6. Hydrocortisone Acetate	In- House Method LWI-238-54-04 (Adulteration of Dietary Supplements with Drugs and Drug AnalogsCorticosteroids Drugs (Screening)) based on USP41 <2251>:2020
Clincanthus Nutans (burm F.) Lindau (belalai Gajah) Herbal Extract	Qualitative identification by fingerprinting with schaftoside as marker	SIRIM/MOA 4-1:2019 Herbal extracts- Specification- Part 1: Belalai gajah (Clinacanthus nutans (Burm.f.) Lindau) spray dried aqueous extract Annex B
Marantodes Pumilium (blume) Kuntze Syn Labisia Pumila (blume) Fern.- Vill (kacip Fatimah) Herbal Extract	Qualitative identification by fingerprinting with gallic acid as marker	SIRIM/MOA 4-5:2019 Herbal extracts- Specification- Part 5: Kacip Fatimah (Marantodes Pumilum (Blume) Kuntze syn Labisia pumila (Blume) Fern.-Vill) spray dried aqueous extract Annex B
Orthosiphon Aristatus (blume) Miq (misai Kucing) Herbal Extract	Qualitative identification by fingerprinting with sinensetin and rosmarinic acid as marker	SIRIM/MOA 4-7:2019 Herbal extracts- Specification- Part 7: Misai Kucing (Orthosphon aristatus (Blume) Miq.) spray dried aqueous extract Annex B
Eurycoma Longifolia Jack (tongkat Ali) Herbal Extract	Qualitative identification by fingerprinting with eurycomanone as marker	SIRIM/MOA 4-11:2019 Herbal extracts- Specification- Part 11 :Tongkat ali (Eurycoma longifolia Jack) spray dried aqueous extract Annex B
Protective Gloves (polymer & Textiles)	Polycyclic Aromatic Hydrocarbons (PAHs) in protective gloves: a) Benzo[a]pyrene b) Benzo[e]pyrene c) Benzo[a]anthracene d) Chrysene e) Benzo[b]fluoranthene f) Benzo[j]fluoranthene g) Benzo[k]fluoranthene h) Dibenzo[a,h]anthracene	ISO 21420:2020, ISO/TS 16190:2013 & ISO 28540:2011

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Cosmetic Product (liquids And Cream Samples)	Detection of steroid element as follows: a) Hydrocortisone acetate, b) Dexamethasone c) Betamethasone d) Betamethasone 17-valerate e) Triamcinolone acetonide	In-house Method LWI-238-133 based on ASEAN Cosmetic Directive ;2013 (Document No: ACM 007/ Revision 1)
1) Chemicals 2) Cosmetics And Essential Oils: A) Cosmetics And Toiletries B) Essential Oils C) Herbal-based Cosmetics	i) Determination of protein reactivity for prediction of the sensitizing potential.	OECD Test Guideline 442C, In Chemico Skin Sensitisation Assays Addressing the Adverse Outcome Pathway Key Event on Covalent Binding to Proteins using HPLC.
	ii) Determination of luciferase activity induction for prediction of the sensitizing potential of sample.	OECD Test Guideline 442D KeratinoSens antioxidant / electrophile response element (ARE) – Nuclear factor (erythroid-derived 2)- like 2 (Nrf2) Luciferase Test Method using Luminometer.

SCOPE OF TESTING : MICROBIOLOGICAL

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
Bacteriology Laboratory Cosmetic Products	Aerobic Plate Count Yeast & Mould Count	FDA, BAM 2016, Chapter 23, Part A-H
Sterile And Non-sterile Gloves	Aerobic Plate Count Fungi, Yeast & Mould Count	In-House Method Based on INMETRO Nr 332/2012 (National Institute of Metrology, Standardization and Industrial Quality, Brazil)
Traditional Medicine (hard Capsules, Soft Capsules, Liquid, Pills, Powder/granules) Pharmaceutical Drugs	Total Aerobic Microbial Count (TAMC) Total Yeast & Mould Count (TYMC) Detection of Specified Organisms: a) Bile Tolerant Gram Negative Bacteria b) Escherichia coli c) Salmonella d) Staphylococcus aureus e) Pseudomonas aeruginosa	British Pharmacopoeia (BP) 2018 Appendix XVIB, Microbial Examination of Non- Sterile Product Appendix XVIF, Microbiological Examination of Herbal Medicine Products for Oral Use and Extracts used in their preparation USP <61> USP <62>

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques
I) Chemical Disinfectants And Antiseptics Products	Quantitative suspension test for the evaluation of basic bactericidal activity of chemical disinfectants and antiseptics.	BS EN 1040:2005
Ii) Chemical Disinfectants And Antiseptics Products.	Quantitative suspension test for the evaluation of basic fungicidal or basic yeasticidal activity of chemical disinfectants and antiseptics.	BS EN 1275:2005
Iii) Chemical Disinfectants And Antiseptics Products	Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas.	BS EN 1276:2019
Iv) Chemical Disinfectants And Antiseptics Products	Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas.	BS EN 1650:2019
V) Chemical Disinfectants And Antiseptics Products	Quantitative suspension test for the evaluation of bactericidal activity in the medical area	BS EN 13727:2012+A2:2015
Vi) Chemical Disinfectants And Antiseptics Products	Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity in the medical area.	BS EN 13624:2013
1. Sterile Gloves 2. Sterile Liquid/injectables 3. Sterile And Non-sterile Solid	Bacterial Endotoxin Test by Kinetic Turbidimetric Method	EP 8.0, Clause 2.6.14 Bacterial endotoxin USP <85> Bacterial endotoxin test EN 455-3:2015 Medical gloves for single use ASTM D7102:17 Standard guide for determination of endotoxin on sterile medical gloves USP <161> ISO 10993-12:2021

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Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**
Protective Clothing (surgical Gown, Examination Gown, Glove, Condom, Etc)	Viral Penetration Test	1. ASTM F1671/F1671M-22 Resistance of Materials Used in Protective Clothing to Penetration by BloodBorne Pathogens Using Phi-X174 Bacteriophage Penetration as a Test System. 2. Clothing for protection against contact with blood and body fluids - Determination of resistance of protective clothing materials to penetration by bloodborne pathogens- Test method using Phi-X174 bacteriophage. ISO 16604:2004 (E)
Face Mask, Surgical Gowns, Surgical Drapes, And Sterile Barrier Systems.	In Vitro Determination of Bacterial Filtration Efficiency (BFE)	ASTM F2101-19. Standard Test Method for Evaluating the Bacterial Filtration Efficiency (BFE) of Medical Face Mask Materials, Using a Biological Aerosol of Staphylococcus aureus. ASTM F2100-19. Standard Specification for Performance of Materials Used in Medical Face Masks. BS EN 14683:2019. Medical face masks – Requirements and test methods
Face Mask	Microbial Cleanliness Of Medical Face Masks	BS EN 14683:2019. Medical face masks – Requirements and test methods. ISO 11737-1:2018. Sterilization of health care products – Microbiological methods – Part 1: Determination of a population of microorganisms on products.