

**NO: SAMM 1016**(Issue 5, 1 July 2026 replacement  
of SAMM 1016 dated 6 Mar 2026)

Page: 1 of 8

|                                                                                   |                                                                                                                                          |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LABORATORY LOCATION/<br/>CENTRAL OFFICE:</b>                                   | TECOLAB SDN. BHD.<br>J-2-6, PUSAT KOMERSIAL JALAN KUCHING<br>NO. 115 JALAN KEPAYANG, OFF JALAN KUCHING<br>51200 KUALA LUMPUR<br>MALAYSIA |
|  |                                                                                                                                          |
| <b>ACCREDITED SINCE:</b>                                                          | 19 AUGUST 2021                                                                                                                           |
| <b>FIELD(S) OF TESTING:</b>                                                       | MICROBIOLOGY & 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).

|                             |                                                                                                                              |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>CENTRAL LOCATION:</b>    | TECOLAB SDN. BHD.<br>J-2-6, PUSAT KOMERSIAL JALAN KUCHING<br>NO. 115 JALAN KEPAYANG, OFF JALAN KUCHING<br>51200 KUALA LUMPUR |
| <b>FIELD(S) OF TESTING:</b> | MICROBIOLOGY & TOXICITY                                                                                                      |

**SCOPE OF TESTING: MICROBIOLOGY**

| <b>Material / Product Tested</b>     | <b>Type of Test / Properties Measured / Range of Measurement</b>                                                            | <b>Standard Test Methods / Equipment / Techniques</b> |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Chemical Disinfectants & Antiseptics | Quantitative suspension test for the evaluation of bactericidal activity in the medical area                                | EN 13727                                              |
|                                      | Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity in the medical area                   | EN 13624                                              |
|                                      | Quantitative carrier test for the evaluation of bactericidal activity for instruments used in the medical area              | EN 14561                                              |
|                                      | Quantitative carrier test for the evaluation of fungicidal or yeasticidal activity for instruments used in the medical area | EN 14562                                              |

**NO: SAMM 1016**(Issue 4, 6 March 2026 replacement  
of SAMM 1016 dated 5 May 2025)

Page: 2 of 8

**SCOPE OF TESTING: MICROBIOLOGY**

| Material / Product Tested            | Type of Test / Properties Measured / Range of Measurement                                                                                                                                                                                                     | Standard Test Methods / Equipment / Techniques |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Chemical Disinfectants & Antiseptics | Quantitative suspension test for the evaluation of basic bactericidal activity of chemical disinfectants and antiseptics                                                                                                                                      | EN 1040                                        |
|                                      | Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic, and institutional areas                                                                                | EN 1276                                        |
|                                      | Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic and institutional areas                                                                    | EN 1650                                        |
|                                      | Quantitative non-porous surface test for the evaluation of bactericidal and yeasticidal and/or fungicidal activity of chemicals disinfectants used in food, industrial, domestic, and institutional areas without mechanical action                           | EN 13697                                       |
|                                      | Quantitative test method for the evaluation of bactericidal and yeasticidal and/or fungicidal and/or tuberculocidal and/or mycobactericidal activity on non-porous surfaces with mechanical action employing wipes or mops in the medical area (4-field test) | EN 16615                                       |
|                                      | Quantitative suspension test for the evaluation of sporicidal activity of chemical disinfectants in the medical area                                                                                                                                          | EN 17126                                       |
|                                      | Quantitative suspension test for the evaluation of sporicidal activity of chemical disinfectants used in food, industrial, domestic, and institutional areas                                                                                                  | EN 13704                                       |
|                                      | Hygienic handrub                                                                                                                                                                                                                                              | EN 1500                                        |
|                                      | Methods of airborne room disinfection by automated process - Determination of bactericidal, mycobactericidal, sporicidal, fungicidal, yeasticidal, virucidal and phagocidal activities                                                                        | EN 17272                                       |

**NO: SAMM 1016**(Issue 4, 6 March 2026 replacement  
of SAMM 1016 dated 5 May 2025)

Page: 3 of 8

**SCOPE OF TESTING: MICROBIOLOGY**

| Material / Product Tested            | Type of Test / Properties Measured / Range of Measurement                                                                                                                                      | Standard Test Methods / Equipment / Techniques |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Chemical Disinfectants & Antiseptics | Quantitative surface test for the evaluation of residual antimicrobial (bactericidal and/or yeasticidal) efficacy of liquid chemical disinfectants on hard non-porous surfaces                 | PAS 2424                                       |
|                                      | Quantitative suspension test for the evaluation of mycobactericidal activity of chemical disinfectants in the medical area including instrument disinfectants                                  | EN 14348                                       |
|                                      | Quantitative carrier test for the evaluation of mycobactericidal or tuberculocidal activity of chemical disinfectants used for instruments in the medical area                                 | EN 14563                                       |
|                                      | Quantitative test for the evaluation of bactericidal and yeasticidal and/or fungicidal activity of chemical disinfectants in the medical area on non-porous surfaces without mechanical action | EN 17387                                       |
|                                      | Quantitative suspension test for the evaluation of virucidal activity against bacteriophages of chemical disinfectants used in food and industrial areas                                       | EN 13610                                       |
|                                      | Determination of residual bactericidal efficacy of hand antiseptic formulations using in-vitro skin model                                                                                      | In-House Method 003 – Based on ASTM E3058      |
|                                      | Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in the veterinary area                                                 | EN 1656                                        |
|                                      | Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in the veterinary area                                    | EN 1657                                        |
|                                      | Quantitative surface test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in the veterinary area on non-porous surfaces without mechanical action   | EN 14349                                       |

**NO: SAMM 1016**(Issue 4, 6 March 2026 replacement  
of SAMM 1016 dated 5 May 2025)

Page: 4 of 8

**SCOPE OF TESTING: MICROBIOLOGY**

| Material / Product Tested            | Type of Test / Properties Measured / Range of Measurement                                                                                                                                                 | Standard Test Methods / Equipment / Techniques       |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Chemical Disinfectants & Antiseptics | Quantitative surface test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in the veterinary area on non-porous surfaces without mechanical action | EN 16438                                             |
|                                      | Quantitative suspension test for the evaluation of mycobactericidal activity of chemical disinfectants and antiseptics used in the veterinary area                                                        | EN 14204                                             |
|                                      | Hygienic handwash                                                                                                                                                                                         | EN 1499                                              |
|                                      | Methods of disinfecting surfaces by steam with or without contact – Determination of bactericidal, fungicidal, yeasticidal, sporicidal and virucidal activity including bacteriophages                    | In-House Method 009 – Based on AFNOR NF T72 - 110    |
|                                      | Quantitative suspension test for the evaluation bactericidal activity against Legionella of chemical disinfectants for aqueous systems                                                                    | EN 13623                                             |
|                                      | Quantitative surface test for the evaluation of teat disinfectants used in the veterinary area                                                                                                            | EN 17422                                             |
|                                      | Surgical hand disinfection                                                                                                                                                                                | EN 12791                                             |
|                                      | TGA Disinfectant Test                                                                                                                                                                                     | TGA Instructions for Disinfectant Testing (Part 1)   |
|                                      | Standard test method to determine efficacy of disinfection processes for reusable medical devices (simulated use test)                                                                                    | ASTM E1837                                           |
|                                      | Standard operating procedure for AOAC use-dilution method for testing Disinfectant                                                                                                                        | EPA MB-05-16                                         |
|                                      | Surface disinfection without mechanical action – simulated – use test                                                                                                                                     | VAH Method 14.1 for Mycobacteria                     |
|                                      | Surface disinfection with mechanical action – simulated – use test                                                                                                                                        | VAH Method 14.2 for A. brasiliensis and Mycobacteria |

**NO: SAMM 1016**(Issue 4, 6 March 2026 replacement  
of SAMM 1016 dated 5 May 2025)

Page: 5 of 8

**SCOPE OF TESTING: MICROBIOLOGY**

| Material / Product Tested            | Type of Test / Properties Measured / Range of Measurement                                                                                                                                                   | Standard Test Methods / Equipment / Techniques |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Chemical Disinfectants & Antiseptics | Quantitative test method for the evaluation of sporicidal activity against <i>Clostridioides difficile</i> on non-porous surfaces with mechanical action employing wipes in the medical area (4-field test) | EN 17846                                       |
|                                      | Skin antiseptics – simulated-use test with volunteers                                                                                                                                                       | VAH Method 13                                  |
|                                      | Antimicrobial wound dressings – Requirements and test method                                                                                                                                                | EN 17854                                       |
|                                      | Standard test method for determining disinfectant efficacy against biofilm grown in the CDC biofilm reactor following the procedures in ASTM E3161 or ASTM E2562                                            | ASTM E2871                                     |
|                                      | Quantitative suspension test for the evaluation of virucidal activity in the medical area                                                                                                                   | EN 14476                                       |
|                                      | Quantitative suspension test for the evaluation of virucidal activity of chemical disinfectants and antiseptics used in the veterinary area                                                                 | EN 14675                                       |
|                                      | Quantitative non-porous surface test without mechanical action for the evaluation of virucidal activity of chemical disinfectants used in the medical area                                                  | EN 16777                                       |
|                                      | Quantitative carrier test for the evaluation of virucidal activity for instruments used in the medical area                                                                                                 | EN 17111                                       |
|                                      | Determination of residual virucidal efficacy of hand antiseptic formulations using in-vitro skin model                                                                                                      | In-House Method 002 – Based on ASTM E3058      |
|                                      | Standard practice to assess virucidal activity of chemicals intended for disinfection of inanimate, nonporous environmental surfaces                                                                        | ASTM E1053                                     |
|                                      | Hygienic handrub virucidal                                                                                                                                                                                  | EN 17430                                       |

**NO: SAMM 1016**(Issue 4, 6 March 2026 replacement  
of SAMM 1016 dated 5 May 2025)

Page: 6 of 8

**SCOPE OF TESTING: MICROBIOLOGY**

| Material / Product Tested            | Type of Test / Properties Measured / Range of Measurement                                                                                                                                       | Standard Test Methods / Equipment / Techniques |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Chemical Disinfectants & Antiseptics | Sterility test - Membrane filtration method                                                                                                                                                     | USP 71                                         |
|                                      | Standard guide for assessment of antimicrobial activity using a time-kill procedure                                                                                                             | ASTM E2315                                     |
|                                      | Quantitative non-porous surface test for the evaluation of virucidal activity of chemical disinfectants and antiseptics used in the veterinary area                                             | EN 17122                                       |
|                                      | Microbiological examination of nonsterile products: Microbial enumeration tests – Membrane filtration method                                                                                    | USP 61                                         |
|                                      | Microbiological examination of nonsterile products: Tests for specified microorganisms                                                                                                          | USP 62                                         |
|                                      | Standard test method for evaluation of surgical hand scrub formulations                                                                                                                         | ASTM E1115                                     |
|                                      | Quantitative suspension test for the evaluation of virucidal activity in the food, industrial, domestic and institutional area                                                                  | EN 17914                                       |
|                                      | Quantitative non-porous surface test without mechanical action for the evaluation of virucidal activity of chemical disinfectants used in the food, industrial, domestic and institutional area | EN 17915                                       |
| Medical Examination Gloves           | Standard Test Methods for Determination of Bactericidal Efficacy on the Surface of Medical Examination Gloves                                                                                   | ASTM D7907                                     |
|                                      | Determination of virucidal efficacy on the surface of medical examination gloves                                                                                                                | In-House Method 001 – Based on ASTM D7907      |

**NO: SAMM 1016**(Issue 4, 6 March 2026 replacement  
of SAMM 1016 dated 5 May 2025)

Page: 7 of 8

**SCOPE OF TESTING: MICROBIOLOGY**

| Material / Product Tested            | Type of Test / Properties Measured / Range of Measurement                                                                                                                     | Standard Test Methods / Equipment / Techniques |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Textile                              | Determination of antibacterial activity of textile products                                                                                                                   | ISO 20743                                      |
|                                      | Determination of antiviral activity of textile products                                                                                                                       | ISO 18184                                      |
| Plastics & Other Non-Porous Surfaces | Measurement of antibacterial activity on plastics and other non-porous surfaces                                                                                               | ISO 22196                                      |
|                                      | Measurement of antiviral activity on plastics and other non-porous surfaces                                                                                                   | ISO 21702                                      |
| Contact Lens Care Products           | Microbiological requirements and test methods for products and regimens for hygienic management of contact lenses                                                             | ISO 14729                                      |
|                                      | Method to assess contact lens care products with contact lenses in a lens case, challenged with bacterial and fungal organisms                                                | ISO 18259                                      |
| Synthetic Polymeric Materials        | Standard practice for determining resistance of synthetic polymeric materials to fungi                                                                                        | ASTM G21                                       |
| Health Care Products                 | Measurement of residual proteins recovered from medical devices after cleaning processes                                                                                      | In-House Method 016 – Based on ANSI/AAMI ST98  |
| Medical Devices                      | Sterilization of health care products – Microbiological methods – Part 1: Determination of a population of microorganisms on products                                         | ISO 11737-1                                    |
|                                      | Sterilization of health care products – Microbiological methods – Part 2: Tests of sterility performed in the definition, validation and maintenance of sterilization process | ISO 11737-2                                    |

**NO: SAMM 1016**(Issue 4, 6 March 2026 replacement  
of SAMM 1016 dated 5 May 2025)

Page: 8 of 8

**SCOPE OF TESTING: TOXICITY**

| Material / Product Tested                                                                               | Type of Test / Properties Measured / Range of Measurement | Standard Test Methods / Equipment / Techniques |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|------------------------------------------------|
| Medical Devices / Chemical Disinfectants / Antiseptics / Cosmetics / Pharmaceutical Products / Textiles | Tests for in vitro cytotoxicity                           | ISO 10993-5: Annex C – MTT Cytotoxicity Test   |
|                                                                                                         | Tests for skin irritation                                 | ISO 10993-23: In vitro Skin Irritation Test    |
|                                                                                                         | <i>In vitro</i> EpiDerm skin irritation                   | OECD 439                                       |
|                                                                                                         | <i>In vitro</i> EpiOcular eye irritation test             | OECD 492                                       |
|                                                                                                         | <i>In vitro</i> EpiDerm skin corrosion test               | OECD 431                                       |
|                                                                                                         | Ocular irritation protocol: Neat method (MTT ET-50)       | MTT ET-50: Neat protocol                       |