



## REFERENCE MATERIAL CERTIFICATE

This certificate supersedes all previous issues.



A2LA Accredited  
Reference Material Producer  
Certificate Number 3189.03

|                             |  |                                                                                                                                                                                                                                                                              |
|-----------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name                |  | MV0029 Universal Daily Control                                                                                                                                                                                                                                               |
| Batch Number                |  | RM5929                                                                                                                                                                                                                                                                       |
| Hazard Information          |  | <p>This material contains micro-organisms. Please take suitable precautions at all times when handling this reference material. Please download Safety Data Sheet via below link:</p> <p><a href="#">SDS Microbiological Reference Material</a></p>                          |
| Description of the Material |  | Freeze dried Pellet                                                                                                                                                                                                                                                          |
| Presentation                |  | <div>Individual units are heat sealed in a plastic bag and placed in a plastic jar</div> <div>Number of Units provided: Three (3)</div> <div>Each unit consists of: 1 pellet</div> <div>Units are contained in: Stoppered glass vials</div>                                  |
| Target Organism Content     |  | <div>Organism Name (IFM Number)</div> <div>Bacillus cereus (1604)</div> <div>Clostridium perfringens (1704)</div> <div>Enterococcus faecalis (3301)</div> <div>Escherichia coli (2005)</div> <div>Klebsiella aerogenes (2201)</div> <div>Pseudomonas aeruginosa (5005)</div> |

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                               |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| <b>Intended Use</b>          | Microbiological Reference Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                               |
| <b>Instructions for Use</b>  | <p>Store unopened material at 2°C - 6°C protected from light until used. Use aseptic technique at all times.</p> <ol style="list-style-type: none"><li>1. Aseptically open the vial.</li><li>2. Add 10ml of Peptone water or Butterfields solution into the vial.</li><li>3. Dissolve the pellet using a sterile transfer pipette and mix thoroughly.</li><li>4. Stand for 30 minutes at room temperature, protected from light.</li><li>5. Dilute to achieve counts in suitable ranges for work being undertaken.</li><li>6. Refer to the table below for reference values.</li></ol> <p>Mix thoroughly before testing to resuspend settled product. Materials must only be used on the day of preparation. Once prepared, materials must be stored at 2 °C - 6 °C protected from light.</p> <p>Values quoted in this certificate do not apply when the reference material is used in a manner contrary to the instructions. Values quoted have been statistically verified using the instructions described above. The specified volume in the instructions is the minimum sample size required to yield the defined quantitative parameters.</p> |                               |
| <b>Date of Certification</b> | October 15, 2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                               |
| <b>Certificate Expiry</b>    | January 31, 2026                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | This is the final certificate |
| <b>Product Expiry</b>        | January 31, 2026                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                               |

Certified values and their uncertainties

Tests were conducted on: September 23, 2025  
5 replicate data points were used to generate this certificate

Data was log transformed prior to applying statistical processes. The assigned value is the average of results on the declared day of test. The uncertainty of the assigned value is the largest standard error of each conducted test series. The lower limit takes into account the expected decline of the microbe levels over the certification interval. These have been calculated using all factors as described in ISO 17034.

Results are  
expressed as  
cfu/vial

| Test Name<br>(Method Reference)           | Assigned Value | Uncertainty of<br>the Assigned<br>Value (log) | Standard<br>Deviation (log) | Calculated Limits for Daily Control<br>Purposes |           |
|-------------------------------------------|----------------|-----------------------------------------------|-----------------------------|-------------------------------------------------|-----------|
|                                           |                |                                               |                             | High limit                                      | Low limit |
| Bacillus cereus Count (IFM0719.2)         | 1.9E+05        | 0.01                                          | 0.02                        | 6.7E+05                                         | 3.7E+04   |
| Clostridium perfringens Count (IFM0718.1) | 9.9E+03        | 0.01                                          | 0.03                        | 3.5E+04                                         | 2.7E+03   |
| Coliform Count (IFM0705)                  | 5.3E+04        | 0.02                                          | 0.04                        | 9.7E+04                                         | 3.3E+03   |
| E. coli Count (IFM0705)                   | 1.7E+04        | 0.02                                          | 0.06                        | 4.2E+04                                         | 2.7E+03   |
| Enterococcus spp. Count (IFM0711.2)       | 2.0E+04        | 0.02                                          | 0.05                        | 7.9E+04                                         | 3.5E+03   |
| Pseudomonas aeruginosa Count (IFM0709.1)  | 1.1E+04        | 0.02                                          | 0.05                        | 4.7E+04                                         | 3.0E+02   |
| Standard Plate Count (IFM0701.3)          | 2.7E+05        | 0.03                                          | 0.06                        | 6.5E+05                                         | 8.1E+04   |
|                                           |                |                                               |                             |                                                 |           |
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|                                           |                |                                               |                             |                                                 |           |
|                                           |                |                                               |                             |                                                 |           |
|                                           |                |                                               |                             |                                                 |           |

Additional Test Comments/Information

Test Names marked with an \* are not within the scope of accreditation

Authorised By

Samuel Baillie, Production Technician

Control Chart for:

## Bacillus cereus Count (IFM0719.2)

Certification Date: 15/10/2025

Expiry: 31/01/2026

| CRM Solution Preparation Date | Test Date | Details of settings / dilutions | Media Name and Batch / Method details | Date / Initials | Count obtained | less than | 36583 | 162712 | 288940 | 414968 | 541097 | more than 6 | Date / Initials |
|-------------------------------|-----------|---------------------------------|---------------------------------------|-----------------|----------------|-----------|-------|--------|--------|--------|--------|-------------|-----------------|
|                               |           |                                 |                                       |                 |                |           |       |        |        |        |        |             |                 |
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|                               |           |                                 |                                       |                 |                |           |       |        |        |        |        |             |                 |
| Assessed and reviewed by:     |           |                                 | Comments:                             |                 |                |           |       |        |        |        |        |             |                 |

|                                                              |           |                                 |                                       |                 |                |                    |      |    |      |    |       |    |       |    |       |    |       |                                   |
|--------------------------------------------------------------|-----------|---------------------------------|---------------------------------------|-----------------|----------------|--------------------|------|----|------|----|-------|----|-------|----|-------|----|-------|-----------------------------------|
| Control Chart for: Clostridium perfringens Count (IFM0718.1) |           |                                 |                                       |                 |                | 2748               |      |    |      |    |       |    |       |    |       |    |       | MV0029 Universal<br>Daily Control |
| Certification Date: 15/10/2025                               |           |                                 |                                       |                 |                | Expiry: 31/01/2026 |      |    |      |    |       |    |       |    |       |    |       | RM5929                            |
| CRM Solution<br>Preparation Date                             | Test Date | Details of settings / dilutions | Media Name and Batch / Method details | Date / Initials | Count obtained | less than          | 2749 | to | 9273 | to | 15797 | to | 22320 | to | 28843 | to | 35367 | Date / Initials                   |
|                                                              |           |                                 |                                       |                 |                |                    |      |    |      |    |       |    |       |    |       |    |       |                                   |
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| Assessed and reviewed by:                                    |           |                                 | Comments:                             |                 |                |                    |      |    |      |    |       |    |       |    |       |    |       |                                   |

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|---------------------------------------------|-----------|---------------------------------|---------------------------------------|-----------------|----------------|--------------------|------|----|-------|-------|----|-------|-------|----|-------|-------|----|-----------------------------------|-------|----|-------|-----------|-------|--------|-----------------|
| Control Chart for: Coliform Count (IFM0705) |           |                                 |                                       |                 |                | 3312               |      |    |       |       |    |       |       |    |       |       |    | MV0029 Universal<br>Daily Control |       |    |       |           |       |        |                 |
| Certification Date: 15/10/2025              |           |                                 |                                       |                 |                | Expiry: 31/01/2026 |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
| CRM Solution<br>Preparation Date            | Test Date | Details of settings / dilutions | Media Name and Batch / Method details | Date / Initials | Count obtained | less than          | 3313 | to | 21950 | 21951 | to | 40588 | 40589 | to | 59226 | 59227 | to | 77864                             | 77865 | to | 96502 | more than | 96502 | RM5929 | Date / Initials |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
|                                             |           |                                 |                                       |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |
| Assessed and reviewed by:                   |           |                                 | Comments:                             |                 |                |                    |      |    |       |       |    |       |       |    |       |       |    |                                   |       |    |       |           |       |        |                 |

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|--------------------------------------------|-----------|---------------------------------|---------------------------------------|-----------------|----------------|--------------------|------|----|-------|----|-------|----|-------|----|-------|----|-------|-----------------------------------|
| Control Chart for: E. coli Count (IFM0705) |           |                                 |                                       |                 |                | 2724               |      |    |       |    |       |    |       |    |       |    |       | MV0029 Universal<br>Daily Control |
| Certification Date: 15/10/2025             |           |                                 |                                       |                 |                | Expiry: 31/01/2026 |      |    |       |    |       |    |       |    |       |    |       |                                   |
| CRM Solution<br>Preparation Date           | Test Date | Details of settings / dilutions | Media Name and Batch / Method details | Date / Initials | Count obtained | less than          | 2725 | to | 10533 | to | 18342 | to | 26150 | to | 33958 | to | 41767 | Date / Initials                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                            |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
| Assessed and reviewed by:                  |           |                                 | Comments:                             |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |

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|--------------------------------------------------------|-----------|---------------------------------|---------------------------------------|-----------------|----------------|--------------------|------|----|-------|----|-------|----|-------|----|-------|----|-------|-----------------------------------|
| Control Chart for: Enterococcus spp. Count (IFM0711.2) |           |                                 |                                       |                 |                | 3473               |      |    |       |    |       |    |       |    |       |    |       | MV0029 Universal<br>Daily Control |
| Certification Date: 15/10/2025                         |           |                                 |                                       |                 |                | Expiry: 31/01/2026 |      |    |       |    |       |    |       |    |       |    |       | RM5929                            |
| CRM Solution<br>Preparation Date                       | Test Date | Details of settings / dilutions | Media Name and Batch / Method details | Date / Initials | Count obtained | less than          | 3474 | to | 18579 | to | 33682 | to | 48787 | to | 63891 | to | 78996 | Date / Initials                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
|                                                        |           |                                 |                                       |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |
| Assessed and reviewed by:                              |           |                                 | Comments:                             |                 |                |                    |      |    |       |    |       |    |       |    |       |    |       |                                   |



|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|-------------------------------------------------------------|-----------|---------------------------------|---------------------------------------|-----------------|----------------|--------------------|-----|----|------|----|-------|----|-------|----|-------|----|-------|-----------------------------------|-------|-----------------|
| Control Chart for: Pseudomonas aeruginosa Count (IFM0709.1) |           |                                 |                                       |                 |                | 302                |     |    |      |    |       |    |       |    |       |    |       | MV0029 Universal<br>Daily Control |       |                 |
| Certification Date: 15/10/2025                              |           |                                 |                                       |                 |                | Expiry: 31/01/2026 |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
| CRM Solution<br>Preparation Date                            | Test Date | Details of settings / dilutions | Media Name and Batch / Method details | Date / Initials | Count obtained | less than          | 303 | to | 9577 | to | 18851 | to | 28125 | to | 37398 | to | 46672 | more than                         | 46672 | RM5929          |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       | Date / Initials |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
|                                                             |           |                                 |                                       |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |
| Assessed and reviewed by:                                   |           |                                 | Comments:                             |                 |                |                    |     |    |      |    |       |    |       |    |       |    |       |                                   |       |                 |

Control Chart for:

## Standard Plate Count (IFM0701.3)

Certification Date: 15/10/2025

Expiry: 31/01/2026

[illegible]