# OXOID QUALITY ASSURANCE PRODUCT SPECIFICATION

# BRILLIANT GREEN AGAR (MODIFIED) CM0329

**BRILLIANT GREEN AGAR (MODIFIED)** **CM0329**

**Typical Formula***

| | | |
|---|---|---|
| 'Lab-Lemco' powder | grams per litre | 5.0 |
| Peptone | | 10.0 |
| Yeast extract | | 3.0 |
| Di-sodium hydrogen phosphate | | 1.0 |
| Sodium dihydrogen phosphate | | 0.6 |
| Lactose | | 10.0 |
| Sucrose | | 10.0 |
| Phenol red | | 0.09 |
| Brilliant green | | 0.0047 |
| Agar | | 12.0 |

* adjusted as required to meet performance standards

**Directions**

Suspend 52g in 1 litre of distilled water. With frequent agitation, bring to the boil to dissolve completely. Cool to 50°C. Mix well and pour into sterile Petri dishes. DO NOT AUTOCLAVE. This product is subject to slight colour variations. However, this does not affect the microbiological performance.

**Physical Characteristics**

Light green to orange, free-flowing powder
Colour on reconstitution - orange/red
Moisture level - less than or equal to 7%
pH 6.9 ± 0.2 at 25°C
Clarity - clear
Gel strength - firm, comparable to 12.0g/litre of agar

**Microbiological Tests Using Optimum Inoculum Dilution**

Control Medium: Tryptone Soya Agar

**Reactions after incubation at 37°C for 18 hours**

Medium is challenged with 10-100 colony-forming units

| | | |
|---|---|---|
| *Salmonella enteritidis* | ATCC®13076 | 1-4mm red colonies and medium |
| *Salmonella typhimurium* | ATCC®14028 | 0.5-4mm red colonies and medium |

| | | |
|---|---|---|
| *Salmonella virchow* | NCTC5742 | 1-4mm red colonies and medium |
| *Salmonella nottingham* | NCTC7832 | 0.5-4mm red colonies and medium |
| *Pseudomonas aeruginosa* | ATCC®9027 | 0.5-1.5mm red colonies and medium |

A satisfactory result is represented by recovery of positive strains equal to or greater than 70% of the control medium.

For *Pseudomonas aeruginosa* ATCC®9027, a satisfactory result is represented by recovery equal to or greater than 50% of the control medium.

Medium is challenged with 1E+04 to 1E+06 colony-forming units

| | | |
|---|---|---|
| *Escherichia coli* | ATCC®25922 | No growth or ppt-1mm yellow/green colonies |

For *Escherichia coli* ATCC®25922, a satisfactory result is represented by a negative diagnostic reaction.

Medium is challenged with 1E+03 to 1E+05 colony-forming units

| | | |
|---|---|---|
| *Escherichia coli* | ATCC®11775 | No growth or ppt-1mm yellow/green colonies |
| *Proteus mirabilis* | ATCC®29906 | No growth or ppt-1mm pink colonies, no swarming |
| *Proteus mirabilis* | ATCC®12453 | No growth or ppt-1mm pink colonies, no swarming |
| *Enterobacter cloacae* | ATCC®13047 | No growth or 0.5-1mm yellow/green colonies and medium |

Negative strains are inhibited or shall produce at least a 1 log (10) reduction when compared to the control medium.

Additional challenging strains are employed.

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## Revision History

| Section / Step | Description of Change | Reason for Change | Reference |
|---|---|---|---|
| Physical characteristics | Change of powder appearance | Change control | MOC-2022-0749 |
| Microbiological characteristics | Correct typographical error '*Enterococcus*' to '*Enterobacter*' | | |