# A green and blue logo  Description automatically generated

**BRILLIANT GREEN Agar**

Selective and differential medium for the isolation of Salmonella species other than S. typhi and S. paratyphi from clinical specimens.

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| REF: V.1/BGA01.100 100 GramREF: V.1/BGA01.500 500 Gram | REF: V.1/BGA01.250 250 Gram |

## CLINICAL SIGNIFICANCE

## Brilliant Green Agar was initially developed in 1925 by Kristensen and later modified by Kauffmann in 1935. Galton and Quan demonstrated that when used in conjunction with Tetrathionate Broth, Brilliant Green Agar could be used effectively for the isolation of Salmonella from fecal specimens.

## METHOD PRINCIPLE

## The base includes the nutritive components meat and casein peptone, and yeast extract that provides the organism with nitrogen, amino acids, and vitamins. Phenol red is the pH indicator that detects changes in pH due to the fermentation of sucrose and/or lactose. The selectivity is due to the dye, brilliant green, which inhibits the majority of gram-positive and some gram negative bacteria including Salmonella typhi and Shigella species. Because of the high selectivity of the agar a heavy inoculum may be used when streaking the plate.

## MEDIA COMPOSITION

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| Item | Formula per liter of medium |
| * Proteose peptone
* Yeast extract
* Sucrose
* Lactose
* Brilliant Green
* Sodium chloride
* Phenol red
* Agar
 | 10.00 gm3.000 gm10.00 gm10.30 gm0.0125 gm5.000 gm0.080 gm12.00 gm |

***pH 6.9±0.2 at 25 °C***

**PRECAUTIONS AND WARNINGS**

Media to be handled by entitled and professionally educated person. Do not ingest or inhale.

Good Laboratories practices using appropriate precautions should be followed in:

* Wearing personnel protective equipment (overall, gloves, glasses,).

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| **Oranism** | **Growth** | **Colony** | **Medium** |
| Salmonella enteritidis ATCC® 13076 | luxuriant | red | red |
| Salmonella typhimurium ATCC® 14028 | luxuriant | red | red |
| Salmonella virchow NCTC 5742 | luxuriant | red | red |
| Pseudomonas aeruginosa ATCC® 9027 | None to poor | red | red |
| Escherichia coli ATCC® 25922 | None to poor | Yellow/Green |  |
| Escherichia coli ATCC® 11775 | None to poor | Yellow/Green |  |
| Enterobacter cloacae ATCC® 13047 | None to poor | Yellow/Green |  |
| Proteus mirabilis ATCC® 12453 | None to poor | Colorless  |  |

* Do not pipette by mouth.
* In case of contact with eyes or skin; rinse immediately with plenty of soap and water. In case of severe injuries; seek medical advice immediately.
* Respect country requirement for waste disposal.

S56: dispose of this material and its container at hazardous or special waste collection point.

S57: use appropriate container to avoid environmental contamination.

S61: avoid release in environment.

For further information, refer to Brillaint green Agar material safety data sheet.

**STORAGE AND STABILITY**

**Lab.Vie**. BRILLIANT GREEN Agar should be stored between 10-30°C in a firmly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to avoid lump development due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in a dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

## PREPARATION

Suspend 50g in 1 liter of distilled water. Bring to the boil to dissolve completely. Sterilize by autoclaving at 121°C for 15 minutes. Cool to 50°C. Mix well and pour into sterile Petri dishes.

**Deterioration**

The color of **Lab.Vie**. BRILLIANT GREEN Agar is Light yellow to light pink homogeneous free flowing powder. Prepared medium is Greenish brown clear to slightly opalescent gel. If there are any physical changes for powder or signs of deterioration (shrinking, cracking, or discoloration), and contaminations for hydrated media, discard the medium.

## SPECIMEN

Clinical : faeces

Foodstuffs

Water samples

Pharmaceutical samples

**EQUIPMENT REQUIRED NOT PROVIDED**

* + Petri plates
	+ Sterile Test tubes
	+ Incubator
	+ Autoclave

## PERFORMANCE CHARACTERISTICS

Reactions after incubation at 37°C for 18 hours

## QUALITY CONTROL

To ensure adequate quality control, it is recommended that positive and negative control included in each run. If control values are found outside the defined range, check the system performance. If control still out of range please contact Lab.Vie. technical support.

## REFERENCES

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| SYMBOLS IN PRODUCT LABELLING |
| IVD | For in-vitro diagnostic use | Number of <n> test in the pack |
| LOT | Batch Code/Lot number | Caution |
| REF | Catalogue Number | Do not use if package isdamaged |
|  | Temperature Limitation |  Consult Instruction for use |
|  | Expiration Date |  |
|  | Manufactured by |  |