

Technical Specification Sheet



Brilliant Green Agar w/ Sulfapyridine SKU: 700003352, 700003353, 700003354, 700003355 NCM0133

Intended Use

Brilliant Green Agar w/ Sulfapyridine is used for the selective enrichment of *Salmonella* spp. in a laboratory setting. Brilliant Green Agar w/ Sulfapyridine is not intended for use in the diagnosis of disease or other conditions in humans.

Description

Brilliant Green Agar was first described by Kristensen et al and later modified by Kauffmann. The outstanding selectivity of this medium permits the use of moderately heavy inocula evenly distributed over the surface. The addition of sulfonamides into Brilliant Green Agar further inhibits *Escherichia coli* and *Proteus* spp. Osborne and Stokes used 0.1% Sodium Sulfapyridine to enhance the recovery of *Salmonella* from whole egg and egg yolk.

Typical Formulation

Yeast Extract	3.0 g/L
Enzymatic Digest of Casein	5.0 g/L
Enzymatic Digest of Animal Tissue	5.0 g/L
Sodium Chloride	5.0 g/L
Lactose	10.0 g/L
Sucrose	10.0 g/L
Brilliant Green	0.0125 g/L
Phenol Red	0.08 g/L
Sodium Sulfapyridine	1.0 g/L
Agar	20.0 g/L

Final pH: 6.9 ± 0.2 at 25°C

Formula is adjusted and/or supplemented as required to meet performance specifications.

Precaution

Refer to SDS

Preparation

1. Suspend 59 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes. Avoid overheating.
4. Cool to 45-50°C.

Quality Control Specifications

Dehydrated Appearance: Powder is homogeneous, free flowing, and beige, may have green tint.

Prepared Appearance: Prepared medium is brown-green to red-brown, may have a green tint, and trace to slightly opalescent.

Expected Cultural Response: Cultural response on Brilliant Green Agar w/ Sulfapyridine at 35 ± 2°C and examined for growth after 18 - 24 hours incubation.



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Microorganism	Approx. Inoculum (CFU)	Expected Results	
		Recovery	Reaction
<i>Escherichia coli</i> ATCC® 25922	1000	Partial to complete inhibition	Yellow to green colonies
<i>Salmonella enteritidis</i> ATCC® 13076	10 – 300	Fair to good	Pink colonies
<i>Salmonella typhi</i> ATCC® 19430	1000	None to poor	Pink colonies
<i>Salmonella typhimurium</i> ATCC® 14028	10 - 300	Fair to good	Pink colonies
<i>Staphylococcus aureus</i> ATCC® 25923	1000	Complete Inhibition	----

The organisms listed are the minimum that should be used for quality control testing.

Test Procedure

Refer to appropriate references for instructions on specific material being tested for *Salmonella*.

Results

Refer to appropriate references and procedures for results.

Expiration

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitation of the Procedure

Due to varying nutritional requirements, some strains may be encountered that grow poorly or fail to grow on this medium.

Storage

Store dehydrated culture media at 2-30°C away from direct sunlight. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.



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References

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7. Vanderzant, C., and D. F. Splittstoesser (eds.). Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
8. Eaton, A. D., L. S. Clesceri, and A. E. Greenberg (eds.). 2017. Standard methods for the examination of water and wastewater, 23rd ed. American Public Health Association, Washington, D.C.

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