

**BROMO CRESOL PURPLE AGAR W/O CARBOHYDRATE****TM 1463**For detection and confirmation of *Coliform* bacteria in water and food**Composition**

Ingredients	Gms/Ltr.
Agar	15.00
Proteose peptone	10.00
Sodium chloride	5.00
Beef extract	1.00
Bromo cresol purple	0.02

\* Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct sunlight.

**Instructions for Use**

Dissolve 31.02gms in 950ml distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Dispense in tubes containing Durham's tubes. Sterilize by autoclaving at 15 psi (121°C) for 10 minutes. Cool and aseptically add sterile desired carbohydrate to a final concentration of 0.5 – 1.0% (50ml of carbohydrate solution).

**Appearance:** Purple colour, clear to slight opalescent gel  
**pH (at 25°C):** 6.8 ± 0.2

**Principle**

**BROMO CRESOL PURPLE BROTH BASE** is used for differentiation of various microorganisms based on their fermentation of specific carbohydrates. Group of *Escherichia*, *Enterobacter*, *Citrobacter*, and *Klebsiella* microorganisms, all ferment lactose with acid and gas production. When lactose is fermented it produces acid that changes the color of the medium from blue-purple (alkaline) to yellow (acid). Blue colonies are lactose-negative and yellow colonies are lactose-positive. Peptic digest of animal tissue and Beef extract provide essential growth nutrients for bacterial metabolism. Bromo cresol purple acts as a pH indicator which turns yellow in acidic conditions. Sodium chloride maintains the osmotic balance of the medium

**Interpretation**

Cultural characteristics observed after inoculating (10<sup>3</sup>CFU/ml), on incubation at 35 ± 2° C for 18 - 24 hours.

Microorganisms	ATCC	Inoculum (cfu/ml)	Growth	Acid*/Gas*
<i>Escherichia coli</i>	25922	10 <sup>3</sup>	Luxuriant	+ve/+ve
<i>Klebsiella pneumoniae</i>	13833	10 <sup>3</sup>	Luxuriant	+ve/+ve
<i>Salmonella typhimurim</i>	14028	10 <sup>3</sup>	Luxuriant	+ve/+ve
<i>Shigella flexneri</i>	12022	10 <sup>3</sup>	Luxuriant	+ve/-ve



## PRODUCT DATA SHEET

\* With added carbohydrate

### References

1. Vanderzant, C., et al., Compendium of Methods for the Microbiological Examination of Foods, eds. 3rd Edition. APHA. Washington, D.C. (1992).