

Glucose Agar (i23071)

Glucose Agar (Glucose Bromocresol Purple Agar) is used for isolation and enumeration of *Enterobacteriaceae* and *Bacillus cereus*. It is according to ISO 21528-1: 2004.

Industry: Food / Water / Dairy products

Principles & Uses

The Glucose Bromocresol Purple Agar, formulated according to ISO specifications, is designed for enumerating *Enterobacteriaceae* and *Bacillus cereus*. Its components include tryptone and yeast extract for essential growth nutrients, D-Glucose as the fermentable carbohydrate, and bromocresol purple as a pH indicator. A color change from purple to yellow indicates fermentation. Sodium chloride maintains osmotic balance, and agar serves as the solidifying agent.

Lastly, BCP Glucose Agar is employed to differentiate *Enterobacteriaceae* in urine, water, and food. ISO standards recommend it for confirming *Pseudomonas* spp. in milk.

Yellow colonies indicate glucose fermentation, while purple colonies suggest non-fermentation, with oxidase-negative, glucose-positive colonies confirmed as *Enterobacteriaceae*.

Composition (gr/L)

Tryptone 10, Glucose 10, Yeast Extract 1, Sodium Chloride 5, Bromocresol purple 0.015, Agar 15.

Final pH at 25°C 7.0 ± 0.2

Preparation from dehydrated Powder

Suspend 41.5 g of the powder in 1 Liter of distilled water. Mix Thoroughly. Autoclave at 121°C for 15 minutes.

Quality Control

Dehydrated Appearance: Beige to purple, homogeneous.

Prepared Appearance: Purple, clear to slightly opalescent.

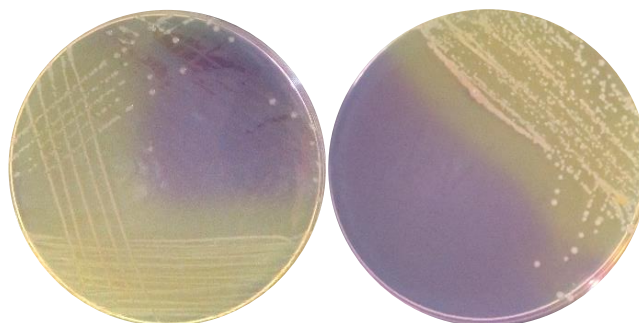
Reaction of 4.15% Solution at 25°C: pH 7.0 ± 0.2

Cultural Response

Inoculate and incubate at 37 ± 2°C for 24 hours.

Organism (ATCC*)	Recovery	Glucose fermentation
<i>Escherichia coli</i> (25922)	Good	+ / Yellow
<i>Enterobacter aerogenes</i> (13048)	Good	+ / Yellow
<i>Pseudomonas aeruginosa</i> (27853)	Good	- / Colorless

*ATCC is a registered trade mark of the American Type Culture Collection.



E. coli (left) and *E. aerogenes* (right), both ferment glucose, causing the medium to turn yellow.

Storage

Keep the container at 15-30 °C. Store prepared medium at 2-8 °C.