

PRODUCT INFORMATION

Phenol Red Dextrose Broth

Cat. No. P16-105

DESCRIPTION

Phenol Red Dextrose Broth is used to differentiate microorganisms based on their ability to ferment dextrose. Enzymatic Digest of Casein provides additional nutrients (nitrogen and carbon) to the microorganisms, while Sodium Chloride serves as source of essential electrolytes and maintains the osmotic equilibrium. The pH indicator Phenol Red shifts from red to yellow upon accumulation of acidic metabolic byproducts, thus revealing dextrose fermentation. Gas production can also be seen using Durham tubes.

FORMULA (g/L)

Enzymatic Digest of Casein	10.0 g	Phenol Red	0.018 g
Sodium Chloride	5.0 g	Dextrose	5.0 g

Final pH: 7.4 ± 0.2 at 25 °C

*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

PREPARATION

Mix 20 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring and boil for one minute to dissolve completely. Distribute and autoclave at 118°C for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and light beige with faint pink tint.
2. Visually the prepared medium is bright red and brilliant to clear.
3. Expected cultural response after 18-48 hours at 35 °C.

ORGANISM	RESULT
<i>Enterococcus faecalis</i> ATCC 29212	Good Growth – Acid (+) Gas (-)
<i>Escherichia coli</i> ATCC 25922	Good Growth – Acid (+) Gas (+)
<i>Pseudomonas aeruginosa</i> ATCC 27853	Good Growth – Acid (-) Gas (-)



STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original color.

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