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ProductInformation

PHENOL RED SUCROSE BROTH

Product Number **P 0977**

Product Description

Phenol Red Sucrose Broth is used for the determination of fermentation of sucrose in the differentiation of microorganisms. The ability of an organism to ferment a specific carbohydrate in the basal medium, results in the production of acid and gas, which helps in the differentiation between the genera and species of bacteria. Phenol Red Sucrose Broth is a complete medium with sucrose. Proteose peptone and beef extract provide nitrogenous nutrients to the organisms. Phenol red is the pH indicator, which turns yellow at acidic pH. Sodium chloride maintains osmotic equilibrium. Gas formation is seen in Durham's tubes.

Components

Item	g/L
Proteose Peptone	10.00
Beef Extract	1.00
Sodium Chloride	5.00
Phenol Red	0.018
Sucrose	5.00

Final pH (at 25 °C) 7.4 ± 0.2

Precautions and Disclaimer

For laboratory use only. Not for drug, household or other uses.

Preparation Instructions

Suspend 21 grams of Phenol Red Sucrose Broth in 1000 mls of distilled water. Heat to dissolve the medium completely. Dispense into tubes containing inverted Durham's tubes and sterilize by autoclaving at 15 lbs. pressure (121 °C) for 15 minutes.

Storage

Store the dehydrated medium at 24 °C and the prepared medium at 2-8 °C.

Product Profile

Appearance	Pink colored, homogeneous, free flowing powder.
Color and Clarity.	Clear red solution without precipitate
Cultural Response	Cultural characteristics are observed after 18-24 hours at 35-37 °C.

Organisms (ATCC)	Growth	Acid	Gas
Citrobacter freundii (8090)	luxuriant	+	+
Enterobacter aerogenes (13048)	luxuriant	+	+
Escherichia coli (25922)	luxuriant	-	-
Klebsiella pneumoniae (13883)	luxuriant	+	+
Proteus vulgaris (13315)	luxuriant	+	+
Salmonella typhimurium (14028)	luxuriant	-	-
Salmonella typhi (6539)	luxuriant	-	-
Serratia marcescens(8100)	luxuriant	+	+
Shigella flexneri (12022)	luxuriant	-	-

Key: + = positive reaction, yellow color
- = negative reaction, no color change or red

References

1. MacFaddin, J., 1985. Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria. Vol. 1. Williams and Wilkins. Baltimore, Maryland.
2. Finegold and Baron, 1986, Bailey and Scott's Diagnostic Microbiology, 7th ed., The C.V. Mosby Co., St. Louis., U.S.A.
3. American Type Culture Collection, Manassas, Va., U.S.A.