



Product Data Sheet

MacCONKEY BROTH W/ NEUTRAL RED (DOUBLE STRENGTH)

Product No. GB-DCM-00401-1A

INTENDED USE

For primary isolation of coliforms from large samples such as water or waste water.

PRODUCT SUMMARY

MacConkey Broth (Double strength) is recommended for detection of bacteria responsible for food poisoning, for isolation, identification and enumeration of Escherichia coli. MacConkey Broth (Double strength) is also recommended for the primary isolation of coliforms from large samples such as water and wastewater. MacConkey Broth has also been recommended for use in microbiological examination of foodstuffs and for direct plating / inoculation of water samples for coliform counts. This media is also used for the Examination of Milk and Dairy Products and pharmaceutical preparations.

Product Specifications

Ingredients	Gms / Ltr
Peptic digest of animal tissue	40.000
Lactose	20.000
Bile salts	10.000
Sodium chloride	10.000
Neutral red	0.140

PRINCIPLE

The selective action of this medium is attributed to bile salts, which are inhibitory to most species of gram-positive bacteria. Gram-negative bacteria usually grow well on the medium and are differentiated by their ability to ferment lactose. Lactose fermenting strains grow as yellow. Lactose non-fermenting strains, such as Shigella and Salmonella are colourless and transparent and typically do not alter appearance of the medium.

INSTRUCTION FOR USE

- Dissolve 80.14 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Distribute into test tubes with inverted Durham tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

- Cool the tubes before inoculation. Note: Where the number of organisms is expected to be low, larger quantities of the sample may be directly added to equal amount of double strength medium in dilution bottles or flasks.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium Red coloured clear solution without any precipitate.

pH (at 25°C) : 7.5± 0.2

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid	Gas	Incubation Temperature	Incubation Period
Klebsiella aerogenes	13048	50-100	Luxuriant	Positive reaction	Positive reaction	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	Positive reaction	Positive reaction	35-37°C	18-24 Hours
Salmonella choleraesuis	12011	50-100	Fair to good	Negative reaction	Negative reaction	35-37°C	18-24 Hours
Staphylococcus aureus	25923	$\geq 10^3$	Inhibited	-	-	35-37°C	18-24 Hours

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

This product is for research use only.