

Violet Red Bile Glucose Agar

SMH581D

Violet Red Bile Glucose Agar is recommended for detection and enumeration of Enterobacteriaceae from pharmaceutical products in accordance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP.

Composition**

Ingredients	Gms / Litre
Yeast extract	3.000
Gelatin Peptone	7.000
Bile salts	1.500
Sodium chloride	5.000
Glucose monohydrate	10.000
Neutral red	0.030
Crystal violet	0.002
Agar	15.000

**Formula adjusted, standardized to suit performance parameters

Directions

Violet Red Bile Glucose Agar is a ready to use solid media in glass bottle. The medium is pre-sterilized; hence it does not need sterilization. Medium in the bottle can be melted either by using a pre-heated water bath or any other method. Slightly loosen the cap before melting. When complete melting of medium is observed dispense the medium as desired and allowed to solidify.

Principle And Interpretation

Violet Red Bile Glucose Agar is a selective medium recommended for detection and enumeration of *Enterobacteriaceae* especially the bile tolerant gram negative bacteria in accordance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP/IP (1,2,3,4,5) from non-sterile products and pharmaceutical preparations.

Pancreatic digest of gelatin and yeast extract provide nitrogenous compounds and other nutrients essential for bacterial metabolism. This media is selective due to presence of the inhibitors; bile salts and crystal violet. Crystal violet inhibits gram-positive organisms especially Staphylococci. Neutral red indicator helps to detect glucose fermentation. Glucose fermenting strains produce red colonies with pink-red halos in the presence of neutral red. Sodium chloride maintains the osmotic equilibrium in the medium. The red colour is due to absorption of neutral red and a subsequent colour change of the dye when the pH of medium falls below 6.8.

Quality Control

Appearance

Sterile Violet Red Bile Glucose Agar in bottles.

Colour

Reddish purple coloured medium.

Quantity of Medium

500 ml of medium in bottles.

pH of medium

7.20- 7.60

Growth Promotion Test

Growth Promotion is carried out in accordance with the harmonized method of USP/EP/BP/JP. Cultural response was observed after an incubation at 30-35°C for 18-24 hours. Recovery rate is considered as 100% for bacteria growth on Soyabean Casein Digest Agar.

Growth promoting properties

Growth of microorganism comparable to that previously obtained with previously tested and approved lot of medium occurs at the specified temperature for not more than the shortest period of time specified inoculating ≤ 100 cfu (at 30-35°C for 18 hours).

Indicative properties

Colonies are comparable in appearance and indication reaction to those previously obtained with previously tested and approved lot of medium occurs for the specified temperature for a period of time within the range specified inoculating 100 cfu (at 30-35°C for 18-72 hours).

Sterility test

Passes release criteria.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of colony	Incubation temperature
Growth Promoting + Indicative					
<i>Escherichia coli</i> ATCC 8739	50 -100	luxuriant	≥50 %	pink-red with bile precipitate	18 -24 hrs
<i>Pseudomonas aeruginosa</i> ATCC 9027	50 -100	luxuriant	≥50 %	pink to red	18 -24 hrs
Additional Microbiological Testing					
<i>Escherichia coli</i> NCTC 9002	50 -100	good-luxuriant	≥50 %	pink-red with bile precipitate	18 -24 hrs
<i>Escherichia coli</i> ATCC 25922	50 -100	good-luxuriant	≥50 %	light pink	18 -24 hrs
<i>Salmonella Enteritidis</i> ATCC 13076	50 -100	good-luxuriant	≥50 %	pink-red	18 -24 hrs
<i>Enterobacter aerogenes</i> ATCC 13048	50 -100	good-luxuriant	≥50 %	pink-red with bile precipitate	18 -24 hrs
<i>Staphylococcus aureus</i> ATCC 25923	≥10 ³	inhibited	0%	-	≥24 hrs
<i>Staphylococcus aureus</i> ATCC 6538	≥10 ³	inhibited	0%	-	≥24 hrs

Storage and Shelf Life

Store between 15-25°C. Use before expiry date on the label.

Reference

Refer Technical data of MH581 Violet Red Bile Glucose Agar.

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Disclaimer :

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