

## TM 1426 -CHROMOGENIC SALMONELLA AGAR

### INTENDED USE

For isolation and differentiation of *Salmonella* species from coliforms.

### PRODUCT SUMMARY AND EXPLANATION

Chromogenic Salmonella Agar is used for isolation and differentiation of *Salmonella* sp. from other enteric bacteria. This media is a modification of the original formulation of Rambach formulation differentiates *Salmonella* based on propylene glycol utilization and presence of chromogenic indicator. However, Chromogenic Salmonella Agar uses only a chromogenic mixture for identification and differentiation of *Salmonella* species.

### COMPOSITION

Ingredients	Gms / Ltr
Agar	13.000
Peptic digest of animal tissue	6.000
Chromogenic mixture	5.400
Yeast extract	2.500
Bile salts mixture	1.000

### PRINCIPLE

Peptone and yeast extract provides nitrogenous, carbonaceous compounds and other essential growth nutrients. *Escherichia coli* and *Salmonella* are easily distinguishable due to their colony characteristics. *Salmonella* forms light purple coloured colonies with a purple halo. *E.coli* and other  $\beta$ -glucuronidase positive organism exhibits a characteristic blue colour, due to presence of the enzyme  $\beta$ glucuronidase. Other organisms form colourless colonies. The characteristic light purple and blue colour is due to the chromogenic mixture. Bile salts mixture inhibits gram-positive organisms. Conventional method employees the  $H_2S$  production property for *Salmonella* detection which is also exhibited by other non-Salmonella species such as *Citrobacter*, *Proteus*, etc. Hence further biochemical confirmation is required for further identification. *Salmonella* species isolated from food or clinical samples exhibit light purple colour with halo due to the specific enzyme substrate reaction

### INSTRUCTION FOR USE

- Suspend 27.90 grams in 1000 ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely. Do not autoclave.
- Cool to 45-50°C.
- Mix well and pour into sterile Petri plates.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow colour, free flowing powder
Appearance of prepared medium	: Light amber colour, slightly opalescent gel
pH (at 25°C)	: 7.7± 0.2

### INTERPRETATION

Cultural characteristics observed after incubation. Recovery rate is considered 100% for bacteria growth on Soya Agar.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temp.	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	≥50%	Blue	35±2 °C	24-48 Hours



<i>Salmonella typhi</i>	6539	50-100	Good-Luxuriant	>=50%	Light purple w/halo	35±2 °C	24-48 Hours
<i>Salmonella typhimurium</i>	14028	50-100	Luxuriant	>=50%	Light purple w/halo	35±2 °C	24-48 Hours
<i>Salmonella enteritidis</i>	13076	50-100	Luxuriant	>=50%	Light purple w/halo	35±2 °C	24-48 Hours
<i>Proteus vulgaris</i>	13315	50 - 100	Good	40-50%	Colourless	35±2 °C	24-48 Hours
<i>Bacillus subtilis</i>	6633	≥1000	Inhibited	0%	-	35±2 °C	24-48 Hours
<i>Staphylococcus aureus</i>	25923	≥1000	Inhibited	0%	-	35±2 °C	24-48 Hours

#### PACKAGING:

In pack size of 100gm & 500gm bottles.

#### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°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 powder 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.

#### REFERENCES

1. Murray, P.R., Baron, E.J., Pfaller, M.A., Jorgensen, J.H., Tenover, R.H. (Eds.). 2003. Manual of clinical microbiology, 8th ed. American Society for Microbiology, Washington, D.C.
2. Rambach, A. 1990. Appl. Environ. Microbiol. 56:301-303.
3. Gruenewald, R., Henderson, R.W., Yappow, S. 1991. J. Clin. Microbiol. 29:2354-2356.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative <small>MedNet GmbH Buckstrasse 10, 49163 Moenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**  
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