

CM 21527 - S.S AGAR WITH SODIUM DEOXYCHOLATE & CaCl (SSDC AGAR)

INTENDED USE

For detection of presumptive pathogenic *Yersinia enterocolitica*.

PRODUCT SUMMARY AND EXPLANATION

SSDC Agar is suggested for detection of presumptive pathogenic *Yersinia enterocolitica* in accordance with ISO Commitee under specifications 10273 :1994. Certain species of enteric organisms reduce sodium thiosulphate to sulphite and H₂S gas. *Yersinia enterocolitica* colonies appear as colourless colonies. Pathogenic *Y. enterocolitica* strains, in particular those of serogroup O:3 are known to tolerate high concentration of bile salts and deoxycholate. Due to the high content of bile salts along with the high sodium citrate concentration and the brilliant green content other accompanying microbial flora gets almost completely or completely inhibited.

COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	10.000
Yeast extract	5.000
Lactose	10.000
Bile salt mixture	8.500
Sodium deoxycholate	10.000
Calcium chloride	1.000
Sodium citrate	10.000
Sodium thiosulphate, anhydrous	5.420
Ammonium Iron (III) citrate	1.000
Brilliant green	0.0003
Neutral red	0.025
Agar	15.000

PRINCIPLE

Peptic digest of animal tissue, yeast extract provides essential growth nutrients. Lactose is the fermentable carbohydrate. Lactose positive organisms appear red due to lactose fermentation and neutral red indicator. Brilliant green, bile salts and thiosulphate selectively inhibit gram positive and coliform organisms.

INSTRUCTION FOR USE

Dissolve 75.94 grams in 1000 ml distilled water.

Heat to boiling by swirling regularly to dissolve the medium completely, do not autoclave or do not overheat.

Cool the medium to about 50°C in water bath.

Mix well and pour into sterile Petri plates.

Note: To avoid precipitation of bile salts, do not exceed the cooling phase for more than one hour.

QUALITY CONTROL SPECIFICATIONS



Appearance of Powder : Light yellow to pink homogeneous free flowing powder.
 Appearance of prepared medium : Orange red coloured, clear to slightly opalescent gel forms in Petri plates.
 pH (at 25°C) : 7.4±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
<i>Yersinia enterocolitica</i>	11502	50-100	Good-luxuriant	≥50%	Colourless Round colonies, approximately 1mm diameter. A finely granulated center can be seen under 10x magnification	25-30°C	24-48 Hours
<i>Yersinia enterocolitica</i>	9676	50-100	Good-luxuriant	≥50%	Colourless round colonies, approximately 1mm diameter. A finely granulated center can be seen under 10x magnification	25-30°C	24-48 Hours
<i>Escherichia coli</i>	25922	≥10 ³	Inhibited	0%	-	25-30°C	24-48 Hours
<i>Bacillus cereus</i>	10876	≥10 ³	Inhibited	0%	-	25-30°C	24-48 Hours

PACKAGING:

In pack size of 100 gm bottles.

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.

REFERENCES

1. International Organization For Standardization (ISO), 1994, Draft ISO/DIS 10273.

