

MM0096

CLED Agar, DI

(Cystine-Lactose Electrolyte-Deficient, Double Indicator Agar)

Use and description:

A dehydrated culture medium recommended for the isolation and enumeration of urinary microorganisms.

Due to the presence of bromothymol blue, lactose-fermenting bacteria are detected by producing yellow halo around colonies. An additional dye, acid fuchsin cause lactose fermenting bacteria to produce pink colonies, non-fermenting species are colorless. It is electrolyte deficient to prevent the swarming of *Proteus* sp. Cystine helps the growth of coliforms.

Composition per liter:

Peptones.....	10.000 g
L-cystine.....	0.128 g
Acid fuchsin.....	0.100 g
Beef extract.....	3.000 g
Lactose.....	10.000 g
Bromothymol blue.....	0.020 g
Agar.....	14.000 g

Final pH of the ready to use medium: 7.5 ± 0.2

Medium preparation:

Add 37.2 grams of dehydrated culture medium to 1 liter of distilled water. Heat with repeated stirring and boil for one minute to dissolve completely. Autoclave at 121.0 °C for 15 minutes cool down and distribute.

Quality specifications:

Dehydrated medium: homogeneous, light beige fine powder.

Ready to use medium: clear, light blue-green

Microbiological response after 18-24 hours incubation at 37 °C:

The plates should not be incubated more than 24 hours as the lactose fermenting organisms will mask the non-lactose fermenter

Organism	Result / colour
<i>Escherichia coli</i> ATCC 25922	Growth/ deep orange-red
<i>Salmonella typhimurium</i> ATCC 14028	Growth/ blue
<i>Staphylococcus aureus</i> ATCC 25923	Growth/ gold yellow
<i>Proteus mirabilis</i> ATCC 12453	Growth/ blue

Storage:

Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or the color has changed from the original.