

# CLED AGAR

**INTENDED USE:**

Recommended for diagnostic urinary bacteriology. The medium supports the growth of all urinary potential pathogens giving good colonial differentiation and clear diagnostic characteristics.

**PRINCIPLE AND INTERPRETATION:**

CLED agar (cystine lactose electrolyte deficient medium) is a valuable non-inhibitory growth medium used in the isolation and differentiation of urinary organisms. Being electrolyte deficient, it prevents the swarming of *Proteus* species. Cystine promotes the formation of cystine-dependent dwarf colonies. Bromothymol blue is the indicator used in the agar, it changes to yellow in case of acid production during fermentation of lactose or changes to deep blue in case of alkalization. Lactose-positive bacteria build yellow colonies. Bacteria which decarboxylate L-Cystine cause an alkaline reaction and build deep blue colonies

**COMPOSITION:**

Ingredients	Gr/Liter
Peptone	4 gr
Meat extract	3 gr
Tryptone	4 gr
Lactose	10 gr
L-cystine	0,128 gr
Bromothymol blue	0,02 gr
Agar	15 gr

\*\*\*Formula adjusted, standardized to suit performance parameters

pH: 7,3 ± 0,2

**PRECAUTIONS:**

For professional use only. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

**TEST PROCEDURE:**

- Inoculate representative samples with dilutions of the cultures listed below.
  - Spread-inoculate with  $10^3$ - $10^4$  CFU for all organisms.
  - Incubate plates at  $35 \pm 2^\circ\text{C}$  in an aerobic atmosphere.
  - Include Tryptic Soy Agar with 5% Sheep Blood plates as nonselective controls for all organisms.
- Examine plates at 18-24 and 48 h for growth, pigmentation, colony size and inhibition of *Proteus* swarming/spreading.

**QUALITY CONTROL:****1.Sterility Control:**

Incubation 72 hours at 20-25°C and 48 hours at 30-35°C: NO GROWTH

**2.Physical/Chemical Control**

pH: 7,3 ± 0,2

**Apperance:** Blue/green coloured gel

**3.Microbiological Control:** Incubation at 37 °C during 18-24 h.

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
<i>Proteus vulgaris</i> ATCC 8427	10-100	Growth	Good growth; blue green translucent colonies
<i>Proteus mirabilis</i> ATCC 12453	10-100	Growth	Good growth; blue colonies; no swarming
<i>Staphylococcus aureus</i> ATCC 25923	10-100	Growth	Good growth; yellow colonies

**STORAGE CONDITIONS AND SHELF LIFE:**

Store the prepared medium at 2 -12°C. Use before expiry date on the label. Do not use beyond stated expiry date.

## DISPOSAL:

Incubated prepared medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected plate should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

## PACKAGING:

**Katalog Number:** 02023

**Packaging:** Single wrap

**Content:** 10 plates/each package

## REFERENCES:

1. Mackey J. P. and Sandys G. H. (1966) B.M.J. 1. 1173.
2. Sandys G. H. (1960) J. Med. Lab. Techn. 17. 224.
3. Mackey J. P. and Sandys G. H. (1965) B.M.J. 2. 1286-1288.
4. Guttman D. and Naylor G. R. E. (1967) B.M.J. 2. 343-345.



Aseptic Sterile



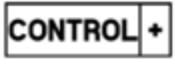
Batch Code



Catalogue Number



Negative Controls



Positive Controls



Use by



Temperature  
Limitation



Do not reuse



Contains sufficient  
for <n> tests



Look at user manual



Manufacturer



CE Mark