

TECHNICAL DATA SHEET

CYSTINE-LACTOSE-ELECTROLYTE-DEFICIENT (CLED) AGAR PLATES P90/CLED - 20

INTENDED USE

CLED Agar is recommended for the isolation, enumeration, and presumptive identification of urinary pathogens.

TYPES OF SAMPLE

- Clinical

PRINCIPLE

CLED Agar (Cystine-Lactose-Electrolyte-Deficient Agar) is a differential medium used for the isolation and enumeration of urinary pathogens. It supports the growth of a wide range of organisms while preventing swarming of Proteus species.

Medium Components and Functions:

- Enzymatic digests of casein and gelatine, beef extract: Provide essential nitrogen, vitamins, minerals, and amino acids.
- L-cystine: Supports growth of cystine-dependent dwarf coliforms.
- Lactose: Fermentable carbohydrate source; organisms fermenting lactose lower the pH.
- Bromothymol Blue: pH indicator; shifts colour from green to yellow in acidic conditions.
- Agar: Solidifying agent.

INGREDIENTS

Approximate Formula Per Liter	
Lactose	10.0 g
Enzymatic Digest of Gelatin	4.0 g
Enzymatic Digest of Casein	4.0 g
L-Lysine	0.128 g
Beef extract	3.0 g



L-Cystine	0.128 g
Bromothymol Blue	0.02 g
Agar	15.0 g
Final pH 7.3 ± 0.2 at 25°C	

PHYSICAL PARAMETERS OF PREPARED PLATES

- Appearance: 90 mm petri plates with a smooth surface and absence of any particles, cracks, or bubbles.
- Colour: Blue Green
- Clarity: Slightly Opalescent

STERILITY CHECK

Sterility of the plates is checked by incubating the plates at 35-37°C for 2 days.

MICROBIAL PERFORMANCE DATA

Culture characteristics observed after inoculating 50-100 CFU and incubate at 35-37 °C for 24-48 hours.

Test Strains	ATCC No.	Inoculum	Growth	Colour of the colony
<i>Enterococcus faecalis</i>	ATCC 29212	50-100 CFU	Good	Small Yellow colonies
<i>Escherichia coli</i>	ATCC 25922	50-100 CFU	Good	Yellow colonies with deeper yellow centre
<i>Proteus mirabilis</i>	ATCC 25933	50-100 CFU	Good	Translucent Blue Colonies
<i>Staphylococcus aureus</i>	ATCC 25923	50-100 CFU	Good	Deep Yellow colonies
<i>Pseudomonas aeruginosa</i>	ATCC 27853	50-100 CFU	Good	Green colonies with matted surface
<i>Salmonella typhimurium</i>	ATCC 14028	50-100 CFU	Good	Bluish colonies
<i>Klebsiella pneumoniae</i>	ATCC 13883	50-100 CFU	Good	Yellow to whitish blue colonies

LIMITATIONS & COMPLEMENTARY TESTS

- It is recommended that biochemical, immunological, molecular, or mass spectrometry testing be performed on colonies from pure culture for complete identification of bacteria and/or fungi.

PRECAUTIONS

- For in-Vitro diagnostic use. Read the label details and storage before opening the pack.
- Wear protective gloves / protective clothing / eye protection / face protection.
- Follow good microbiological lab practices while handling specimens and culture.

PACK SIZE AND PACKAGING

- 20 plates per kit packed with gamma irradiated packing material.

STORAGE & SHELF LIFE

- Store at 10 -15 °C.
- Use before the expiry date mentioned on the label.
- Product is temperature sensitive; protect from direct sunlight, excessive heat, moisture, and freezing.

DISPOSAL

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Materials that have come in contact with infectious / clinical samples must be decontaminated and disposed of in accordance with current laboratory techniques and regulations.