Chaitanya Group Of Industries

ReadyMED®
Dehydrated Cell Culture Media

Technical Data Sheet

CLED Agar (L-Cystine Lactose Electrolyte deficient) RDM-CLED-01

Principle
L-Cystine lactose electrolyte deficient medium composed of peptone, tryptone, meat extract, lactose, L-Cystine and bromothymol blue. Literature suggests that the *Proteous* species can be controlled by restricting the electrolytes and by replacing the mannitol by lactose and sucrose with L-Cystine and bromothymol blue. Peptone, meat extract and tryptone serve as the source of all essential nutrients such as amino acids, vitamins, other trace factors. L-Cystine is added as a growth supplement for cystine-dependent coliforms. Lactose is included as a carbon source and plays a crucial role for selection of lactose fermenting microbes. Brom Thymol Blue is used as a pH indicator. Organisms capable of fermenting lactose will lower the pH of medium, result in change the color of the medium from green to yellow. Agar is used as a solidifying agent.

Use: Recommended for cultivating, differentiating and enumerating lactose fermenting bacteria in urine.

Contents*

Ingredients	**Gram/Litre**
Meat Extract#	3.000
Peptone	4.000
Tryptone	4.000
Lactose	10.000
L-Cystine	0.128
Bromothymol Blue	0.020
Agar	15.000
pH at 25°C	7.3 ±0.2

* Formula adjusted for optimum performance and parameters
#Equivalent of Beef extract

Directions: Dissolve 36.00 grams in 1000 ml distilled water. Boil to dissolve the medium completely and sterilize by autoclaving at 15 lbs pressure (121 °C) for 15 min, cool it to 42-45 °C and distribute aseptically in petri plates. Ensure the complete solidification and inoculate test sample aseptically.

Specimens types analyzed
Pharmaceutical samples, clinical and non-clinical samples etc.

Precautions to be taken
These microbial media are intended for the in-vitro use only. All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation
The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Appearance	Beige with slight green tint colored free flowing, homogeneous powder
Reaction of 3.6% solution	7.30 ±0.2 at 25 ˚C

pH	7.10- 7.50
Gelling	Firm comparable with 1.5% agar gel
Color and clarity of ready medium	Bluish-green, slightly opalescent gel without precipitate.
Growth Promotion properties	Best at ≤ 100 CFU at 32-37 ºC for 18-72 h
Indicative properties	Optimum at ≤ 100 CFU at 32-37 ºC for 18-48 h
Negative control	Performed using sterile distilled water

Different Microbial Response

Organism	Inoculum	Growth	Colony color	Recovery %	Incubation period
Staphylococcus aureus (ATCC 25923)	50-100	Luxurious	Yellow	70-80%	33-37 ℃, 18-48 h
Escherichia coli (ATCC 8739)	50-100	Luxurious	Yellow	70-80%	33-37 ℃, 18-48 h
Salmonella Typhi (ATCC 14028)	50-100	Luxurious	Blue	70-80%	33-37 ℃, 18-48 h

Storage and Shelf Life

Hygroscopic; keep container tightly closed. Store in cool dry place.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Reference

1. Atlas, R. M. (2005). *Handbook of media for environmental microbiology*. CRC press.
2. *Difco Manual* (1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.
3. Rand, M. C., Arnold E. Greenberg, and Michael J. Taras, (1976), *Standard methods for the examination of water and wastewater*. Prepared and published jointly by American Public Health Association, American Water Works Association, and Water Pollution Control Federation.

CHAITANYA AGRO BIOTECH PVT. LTD. An ISO 11134:2014, ISO 13485:2016, ISO 9001:2015 CE, CIN NO.: U24210MH1995PTC095220S,
S. No. 120/2, Laxmi Nagar, Umbarnala Road, Malkapur-443101, Dist.: Buldana (M.S.) India. Customer Care +91-8669083859
rdmsales@chaitanyagroupindia.com, mkt.cabt@chaitanyagroupindia.com, www.chaitanyagroupindia.com