Chaitanya Group Of Industries

ReadyMED®
Dehydrated Cell Culture Media

Technical Data Sheet

Violet Red Bile Lactose Agar

RDM-VRBLA-01

Principle
Violet red bile lactose agar is recommended by APHA (1978) and ISO (1991). Violet red bile lactose agar contains yeast extract, pancreatic digest of gelatin, bile salts, sodium chloride, lactose, neutral red, crystal violet and agar. The pancreatic digest of gelatin serves as a source of carbon, nitrogen, vitamins and minerals. Yeast Extract supplies additional nitrogen, carbon and vitamins which stimulate bacterial growth. Lactose is a source of carbohydrate. Bile salts and crystal violet perform inhibitory action and inhibit gram positive bacteria. The fermentation of lactose to acid is indicated by the pH indicator neutral red, which changes its color to red, and by precipitation of bile acids. Organisms that rapidly attack lactose produce red purple colonies surrounded by purple haloes. While the Non-fermenters or late lactose-fermenters produce pale colonies with greenish zones. Agar is a solidifying agent.

Use: Recommended for selective isolation, detection and enumeration of coli-aerogenes bacteria in food and water, milk other dairy food products and clinical samples.

Contents*

Ingredients	**Gram/Litre**
Yeast Extract	3.000
Pancreatic Digest of Gelatin	7.000
Bile Salts	1.500
Sodium Chloride	5.000
Lactose	10.000
Neutral Red	0.030
Crystal Violet	0.002
Agar	15.000
pH at 25˚C	7.4 ±0.2

* Formula adjusted for optimum performance and parameters

Directions: Dissolve 41.5 grams in 1000 ml distilled water. Heat to boil for 2 minutes to dissolve ingredients completely, **Do Not Autoclave**. In aseptic condition immediately cool it to 42-45°C and distribute in sterile petri plates and allow solidify. Ensure complete solidification and inoculate test sample.

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	Pink-beige colored free flowing, homogeneous powder
Reaction of 4.15% solution	7.4 ±0.2 at 25 ˚C
pH	7.20- 7.60

Gelling	Firm comparable with 1.5% agar gel
Color and clarity of ready medium	Reddish-purple, slightly opalescent gel
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 CFU	Growth	Recovery	Colony color	Incubation period
Gram negative bacteria					
Escherichia coli (ATCC 8739)	50-100	Luxurious	60-70%	Pink-red with bile precipitate	30-37°C, 18-24 hours
Pseudomonas aeruginosa(ATCC 27853)	50-100	Luxurious	60-70%	Pink to purple	30-37°C, 18-24 hours
Gram positive bacteria					
Staphylococcus aureus (ATCC 25923)	50-100	Inhibited	---	--	30-37°C, 18-24 hours

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. American Public Health Association, Standard Methods for the Examination of Dairy Products, (1978), 14th Ed., Washington D.C.
3. International Organization for Standardization (ISO), 1991, Draft ISO/DIS 43

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