Chaitanya Group Of Industries

ReadyMED®
Dehydrated Cell Culture Media

Technical Data Sheet

# Columbia Agar RDM-CMBA-01

**Principle**
The Columbia agar is prepared in accordance harmonized principles of USP/EP/IP. Columbia is composed of pancreatic digest of casein, meat peptic digest, heart pancreatic digest, yeast extract, maize starch, sodium chloride and agar. The pancreatic digest of casein, meat peptic digest, heart pancreatic digest and yeast extract support growth of fastidious microorganisms. The pancreatic digest of casein, meat peptic digest and yeast extract provide nitrogen carbon amino acid and vitamins. The heart pancreatic digest supply additional nitrogen and amino acids. Maize starch serves as an energy source and also neutralizes toxic metabolites. Sodium chloride maintains the osmotic balance of the medium. Agar is a solidifying agent.

**Use**: Recommended for detection of *Clostridium sporogenes* from pharmaceutical products and raw material used in pharmaceutical industries in accordance with the microbial limit testing harmonized principles of USP/EP/IP.

**Contents***

| **Ingredients** | **Gram/Litre** |
|---|---|
| Pancreatic Digest of Casein | 10.00 |
| Meat Peptic Digest | 5.00 |
| Heart Pancreatic Digest | 3.00 |
| Yeast Extract | 5.00 |
| Maize Starch | 1.00 |
| Sodium Chloride | 5.00 |
| Agar | 15.00 |
| pH at 25˚C | 7.3 ±0.2 |

* Formula adjusted for optimum performance and parameters

**Directions:** Dissolve 44.00 grams in 1000 ml distilled water check. 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 if necessary, add gentamicin sulphate corresponding to 20 mg of gentamicin base and pour into sterile petri dishes. Ensure 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 colored free flowing, homogeneous powder |
| **Reaction of 4.4% solution** | 7.3 ±0.2 at 25 ˚C |
| **pH** | 7.10- 7.50 |
| **Gelling** | Firm comparable with 1.5% agar gel |
| **Color and clarity of ready medium** | Light amber colored clear to 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 | ATCC | Inoculum CFU | Growth | Recovery | Incubation |
|---|---|---|---|---|---|
| *Clostridium sporogenes* | 19404 | 50-100 | Luxurious | 60-70% | 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**


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7. *The United States Pharmacopoeia*, (2014), The United States Pharmacopeial Convention. 12601 Twinbrook Parkway, Rockvukke, MD 20852.





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