



Microbiology Culture Media Information Sheet

EMSL Analytical, Inc. provides media for sampling, to our customers at no charge. The following information sheet is designed to help aid in the selection of culture media, providing the most representative sample of the environment possible.

**Bacterial Media**

*Media On-hand*

- TSA (Tryptic Soy Agar)
- TSA w/ Tween 80
- TSA w/ 5% Blood
- MAC (MacConkey)
- Columbia CNA Agar
- HE Agar (Hekton Enteric )
- BCYE agar (Buffered Charcoal Yeast Agar)

*Available with minimal lead time*

- SS agar (Salmonella and Shigella )
- MSA (Manitol Salt Agar)
- EMB (Eosin Methylene Blue)
- BE (Bile Esculin Agar)
- Chocolate Agar
- BHI (Brain Heart Infusion)
- TSI (Triple Sugar Iron Agar)

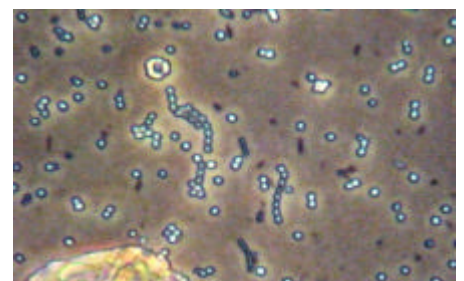
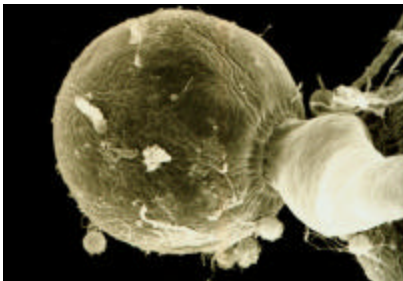
**Fungal Media**

*Media on-hand*

- MEA (Malt Extract Agar)
- PDA (Potato Dextrose Agar)
- Cellulose Agar
- SAB (Sabouraud Dextrose Agar)
- Corn Meal Agar
- DG18 (Dichloran-Glycerol Agar 18)

*Media available with lead time*

- YPD
- Emerson YPSS
- YPG
- Rose Bengal Agar
- Mycological Agar



**EMSL Analytical, Inc.**

***General Media Recommendations For AIR Sampling For Viable Fungi and Bacteria.***

- Fungal Sampling in general, we recommend MEA or CMA
- Sampling for *Stachybotrys* sp. either Cellulose agar ( incubated at RT) or PDA (incubated at 35°C)
- Bacterial sampling in general, we recommend TSA or TSA w 5% Blood
- Sampling for gram negative bacteria , we recommend MacConkey Agar
- All other situations, the Microbiology Department will be happy to make recommendation based on your individual sampling situation.



## Fungal Culture Media

### Media on-hand

- MEA (Malt Extract Agar) 

General purpose media for isolation of fungi and molds.
- PDA (Potato Dextrose Agar) 

General-purpose media used for the isolation of fungi and molds. PDA incubated at 35°C may allow for excellent recovery of *Stachybotrys chartarum*.
- Cellulose Agar 

Multi purpose microbial media used to isolate microbes able to utilize long complex carbohydrates. Most often recommended in IAQ investigations of *Stachybotrys sp.* contamination .
- Czapek Yeast Agar 

Media for the isolation and culture of saprophytic soil microorganisms.
- SAB (Sabouraud Dextrose Agar) 

Gold standard for Cultivation of fungi on rich media. Works well for isolation of fungi.
- Corn Meal Agar 

General purpose media for the cultivation of fungi from the environment, commonly used in IAQ investigation of *Stachybotrys chartarum* contamination.
- DG18 (Dichloran-Glycerol Agar 18) 

Media containing 18% glycerol, used for the recovery of Neophilic yeast and molds. Recommended for recovery in dry locations such as dry powder storage and manufacturing areas.

### Media available with lead time

- YPD 

General purpose media for cultivation of fungi.
- Emerson YPSS 

General purpose media for cultivation of fungi. Particularly good for the cultivation of zoosporic chytrids and other lower fungi.
- YPG 

General purpose media for cultivation of fungi.
- Rose Bengal Agar 

Media used for the selective enumeration of yeast and molds . Rose Bengal is present in the media to restrict (not inhibit) the growth of *Rhizopus* and *Mucor* sp. that often overgrow culture plates.
- Mycological Agar 

Used for the selection and isolation of pathogenic fungi contaminated with saprophytic fungi and bacteria. Contain chloramphenicol and cycloheximide.



## Bacterial Culture Media

### Media On-hand

- TSA (Tryptic Soy Agar)  
General purpose media for isolation and culture of bacteria (gram positive and gram negative).
- TSA w/ Tween 80  
TSA with tween 80, used in the investigation of MIC (minimum inhibitory concentration).
- TSA w/ 5% Blood  
General purpose media for cultivation, isolation and determination of hemolytic activity of bacteria.
- MAC (MacConkey)  
For quantitative procedures for the isolation of gram negative bacteria and for the differentiation of those microorganisms based on fermentation of lactose.
- Columbia CNA Agar  
For the selective isolation of gram positive cocci .
- HE Agar (Hekton Enteric )  
For the isolation and differentiation of gram negative enteric microorganisms.
- BCYE agar (Buffered Charcoal Yeast Agar)  
For the isolation, selection and differentiation of *Legionella* sp. form environmental samples.
- TSI (Triple Sugar Iron Agar)  
For differentiation of gram negative enteric bacteria based on carbohydrate fermentation and hydrogen sulfide production .

### Available with minimal lead time

- SS agar (Salmonella and Shigella )  
For the isolation and differentiation of *Salmonella* and *shigella* sp..
- MSA (Manitol Salt Agar)  
For the selective isolation and differentiation of *Staphylococcus* sp..
- EMB (Eosin Methylene Blue)  
For the isolation and differentiation of gram negative bacteria .
- BE (Bile Esculin Agar)  
For the isolation and identification of Group D *Streptococcus* sp..
- Chocolate Agar  
For the cultivation of pathogenic *Neisseria* and *Haemophilus* sp..
- BHI (Brain Heart Infusion)  
For the cultivation of fastidious and non-fastidious microorganisms.