

Wort Agar

Catalog : HB0291-2

Wort Agar is used for counting and isolation of fungi, especially yeast.

Approximate Formula:

Ingredients	gm/liter
Malt Extract Powder	15.0
Peptone special	0.75
Maltose	12.75
Dextrin	2.75
Potassium dihydrogen phosphate	0.4
Ammonium chloride	1.0
Agar	17.0
Final pH5.0±0.2 at 25 °C	

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 49.65g of the medium and 2.35g of glycerol in one liter of deionized or distilled water. Heat to dissolved. Sterilize in the autoclave at 121 °C (15 lbs.) for 15 minutes. Pour into petri dishes.

Note: DO NOT HEAT REPEATEDLY.

Principle and Interpretation:

Malt extract powder, peptone special and dextrin provide nitrogen source, vitamins, and growth factors. Ammonium chloride provides nitrogen source. Maltose provides carbon source. Potassium dihydrogen phosphate is buffer agent. Glycerin provides energy. Agar is the solidifying agent.

Appearance:

Dehydrated medium is a free-flowing yellowish powder. The prepared medium is a kind of yellowish transparent gel.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

Wort Agar must be stored tightly capped in the original container at 5-30 °C. The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8 °C.

Quality control:

Prepare the medium per label directions. Inoculate and incubate at 20-25 °C for 48-72 hours.

Microorganism	Strains Number	Inoculum (CFU)	Recovery	Growth	Remarks
<i>Aspergillus niger</i>	ATCC 16404	20-200	≥70%	Luxuriant	White hypha
<i>Saccharomyces</i>	ATCC 18790	20-200	≥70%	Luxuriant	Cream colonies
<i>Candida albicans</i>	ATCC 10231	20-200	≥70%	Luxuriant	Cream colonies

References:

- American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
- Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.
- Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.