

## A3340 A C Agar (All Culture Agar)

A C Agar supports an early and luxuriant growth of aerobic, anaerobic and microaerophilic microorganisms.

### Composition:

Ingredients	Grams/Litre
Proteose Peptone	20.0
Beef Extract	3.0
Yeast Extract	3.0
Malt Extract	3.0
Dextrose	5.0
Ascorbic Acid	0.2
Agar	1.0

Final pH 7.2 +/- 0.2 at 25°C

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.

Appearance: Light yellow colored, homogenous, free flowing powder.

Color and Clarity: Medium amber colored, clear to slightly opalescent solution forms in tubes or bottles.

### Directions:

Suspend 35.2 g of AC Agar in 1000 ml of distilled water. Heat to boiling to dissolve the medium completely. Distribute in tubes or bottles to give the desired depth. Sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes. If medium is not used on the same day, it is advisable to drive off dissolved gases by boiling or steaming in the autoclave. Cool without agitation.

### Principle and Interpretation:

It can also be used for sterility testing of solutions and biological products not containing mercurial preservatives. This media does not exhibit the toxicity shown by some media containing sodium thioglycollate for some microorganisms as reported by Christensen(1) and Malin and Finn (2). Nutrients and growth factors are supplied by the proteose peptone, yeast extract and beef extract. Malt extract and dextrose are the carbon sources. Ascorbic acid is a reducing agents and stimulatory for the growth of diverse microorganisms.

Cultural characteristics after 18-24 hours at 35-37°C.

Organisms (ATCC)	Growth
<i>Clostridium perfringens</i> * (12919)	+++
<i>Neisseria meningitidis</i> (13090)	+++
<i>Streptococcus pneumoniae</i> (6303)	+++
<i>Streptococcus mitis</i> (9895)	+++
<i>Staphylococcus aureus</i> (25923)	+++
<i>Escherichia coli</i> (25922)	+++

\*Incubated anaerobically



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#### References:

1. Paper read at N. Y. meeting of American Public Health Association, 1944
2. Malin and Finn, 1951, J. Bacteriology 62: 349.
3. American Type Culture Collection, Manassas, Va., U.S.A.

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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