

# PRODUCT INFORMATION

## A-1 Medium

Cat. No. A01-116



**ALPHA**<sup>™</sup>  
BIOSCIENCES

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### DESCRIPTION

A-1 Medium is used for the detection of fecal coliforms in water. This medium is formulated to hasten the recovery of *Escherichia coli* and to reduce the incidence of false positive tests. This medium can be used as a single-step procedure for the detection of fecal coliforms in a variety of food and water sources. Tryptone provides nitrogen, vitamins, minerals, and amino acids. Lactose is the carbon source and, with salicin, provides energy for organism growth. Sodium chloride maintains the osmotic balance. Triton X-100 is a surfactant.

#### Formula\* per Liter:

Tryptone.....	20.0g
Lactose.....	5.0g
Sodium Chloride.....	5.0g
Salicin.....	0.5g
Triton X-100.....	1.0g

**Final pH:** 6.9 ± 0.2 at 25°C

\* Grams per liter may be adjusted or formula supplemented to obtain desired performance.

### PREPARATION

Mix 31.5 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring to dissolve completely. Distribute into test tubes with Durham tubes and autoclave at 121°C for 10 minutes.

### QUALITY CONTROL SPECIFICATIONS

1. The powder is homogeneous, free flowing with soft lumps, and very light beige.
2. Visually the prepared medium is light yellow, clear to brilliant, with none to light precipitate.
3. Expected cultural response in A-1 Medium incubated aerobically at 35 ± 2°C for 3 hours, followed by incubation in a 44.5°C water bath for 19 – 23 hours.

#### Organism:

*Bacillus subtilis* ATCC® 6633  
*Enterobacter aerogenes* ATCC® 13048  
*Enterococcus faecalis* ATCC® 29212  
*Escherichia coli* ATCC® 25922  
*Escherichia coli* ATCC® 35150

#### Result:

Inhibited  
Poor to Good Growth; Gas negative (-) to weak positive (+)  
None to Fair Growth; Gas negative (-)  
Good to Excellent Growth, Gas positive (+)  
Good to Excellent Growth, Gas positive (+)

### STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is no longer free flowing with soft lumps, or if the color has changed from the original.