# ALPHA™
## BIOSCIENCES

# PRODUCT INFORMATION

Triple Sugar Iron Agar

Cat. No. T20-107

## DESCRIPTION

Triple Sugar Iron Agar in an agar medium used as a differential medium for the presumptive identification of enteric bacteria. The medium contains no growth indicators and most organisms grow, including gram positive organisms and yeasts. Phenol red indicates fermentation of the carbohydrates dextrose, sucrose and lactose. Ferric ammonium citrate is the hydrogen sulfide indicator, causing a blackening in the middle and upper portions of the slant.

## FORMULA (g/L)

| | | | |
|---|---|---|---|
| Enzymatic Digest of Casein | 5.0 g | Sucrose | 10.0 g |
| Peptic Digest of Animal Tissue | 5.0 g | Phenol Red | 0.025 g |
| Sodium Chloride | 5.0 g | Ferric Ammonium Citrate | 0.2 g |
| Yeast Enriched Peptone | 10.0 g | Sodium Thiosulfate | 0.3 g |
| Dextrose | 1.0 g | Agar | 13.5 g |
| Lactose | 10.0 g | | |

Final pH: 7.3 ± 0.2 at 25 ºC

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

## PREPARATION

Mix 60 grams of the medium in one liter of purified water until evenly dispersed. Heat with repeated stirring and boil for one minute to dissolve completely. Distribute and autoclave at 121°C for 15 minutes. After autoclaving, allow for the medium to solidify in a slanted position.

## QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and light beige to pinkish beige.
2. Visually the prepared medium is clear to trace hazy and red-orange.
3. Expected cultural response after 18-24 hours at 35 ºC.

| ORGANISM | RESULT | Slant | Butt | Gas | H2S |
|---|---|---|---|---|---|
| *Escherichia coli* ATCC 25922 | Growth | A | A | + | - |
| *Proteus mirabilis* ATCC 12453 | Growth | K | A | - | + |
| *Pseudomonas aeruginosa* ATCC 10145 | Growth | K | K | - | - |
| *Salmonella enteritidis* ATCC 13076 | Growth | K | N | - | + |
| *Shigella flexneri* ATCC 12022 | Growth | K | A | - | - |

## 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 not free flowing or if the color has changed from the original color.