

## TRYPTOSE AGAR (7347)

### Intended Use

**Tryptose Agar** is used for the cultivation of *Brucella* spp. and other fastidious microorganisms.

### Product Summary and Explanation

Tryptose Agar is recommended for the cultivation and isolation of pathogenic and saprophytic bacteria, especially *Brucella* as specified by Huddleson and Castaneda.<sup>1,2</sup> Huddleson found Tryptose media to be equal or superior to meat infusion media, providing uniformity for the cultivation and differentiation of fastidious organisms.<sup>1</sup> The successful isolation of *Brucella* spp. supports the use of Tryptose media as a rich general purpose media. Tryptose Agar is prepared with Tryptose, which is a mixed enzymatic hydrolysate with rich nutritional value for microbiological culture media. The enzymatic hydrolysis of Tryptose permits the preservation of vitamins and amino acids.

Tryptose Agar is specified in the Compendium of Methods for the Microbiological Examination of Foods.<sup>3</sup> Tryptose media are recommended in the FDA Bacteriological Analytical Manual for serological testing.<sup>4</sup>

### Principles of the Procedure

The nitrogen, vitamins, and carbon sources are provided by Tryptose in Tryptose Agar. Dextrose is the carbohydrate source. Sodium Chloride maintains the osmotic environment. Agar is the solidification agent.

### Formula / Liter

Tryptose .....	20 g
Dextrose.....	1 g
Sodium Chloride .....	5 g
Agar .....	15 g

Final pH: 7.2 ± 0.2 at 25°C

Formula may be adjusted and/or supplemented as required to meet performance specifications.

### Precautions

1. For Laboratory Use.
2. IRRITANT. Irritating to eyes, respiratory system, and skin.

### Directions

1. Suspend 41 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

### Quality Control Specifications

**Dehydrated Appearance:** Powder is homogeneous, free flowing, and light beige.

**Prepared Appearance:** Prepared medium is trace to slightly hazy and yellow-beige.

**Expected Cultural Response:** Cultural response on Tryptose Agar at the appropriate atmosphere and temperature, and examined for growth at 24 – 72 hours incubation.

Microorganism	Approx. Inoculum (CFU)	Response
<i>Brucella ovis</i> ATCC® 25840	10 - 300	Growth
<i>Neisseria meningitidis</i> ATCC® 13090	10 - 300	Growth
<i>Streptococcus pneumoniae</i> ATCC® 6305	10 - 300	Growth
<i>Streptococcus pyogenes</i> ATCC® 19615	10 - 300	Growth

The organisms listed are the minimum that should be used for quality control testing.

### **Test Procedure**

Refer to appropriate references for a complete discussion on the application of Tryptose Agar.

### **Results**

Refer to appropriate references for results.

### **Storage**

Store sealed bottle containing the dehydrated medium at 2 - 30°C. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

### **Expiration**

Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

### **Limitations of the Procedure**

1. Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.

### **Packaging**

<b>Tryptose Agar</b>	<b>Code No.</b>	<b>7347A</b>	<b>500 g</b>
		<b>7347B</b>	<b>2 kg</b>
		<b>7347C</b>	<b>10 kg</b>

### **References**

1. **Huddleson, I. F.** 1943. Brucellosis in man and animals. Rev. Ed. The Commonwealth Fund, New York.
2. **Castaneda.** 1947. **Proc. Soc. Exp. Biol. Med.** **64**:114.
3. **Downes and Ito** (eds.). 2001. Compendium of methods for the microbiological examination of foods. 4<sup>th</sup> ed. American Public Health Association, Washington, D.C.
4. **Harmon, S. M., D. A. Kautter, D. A. Golden, and E. J. Rhodehamel.** 1995. FDA Bacteriological analytical manual, 8<sup>th</sup> ed. AOAC International, Arlington, VA.

### **Technical Information**

Contact Acumedia Manufacturers, Inc. for Technical Service or questions involving dehydrated culture media preparation or performance at (517)372-9200 or fax us at (517)372-2006.