

## Product Information

### B4051 B<sub>12</sub> Inoculum Medium

B<sub>12</sub> Inoculum Medium is used for preparing the inoculum of *Lactobacillus leichmannii* ATCC 7830 in the microbiological assay of Vitamin B<sub>12</sub> as per USP XXI.

#### Composition:

Ingredients	Grams/Litre
Proteose Peptone	7.5
Yeast Extract	7.5
Dextrose	10.0
Monopotassium Phosphate	2.0
Tomato Juice (from 100 ml)	5.0
Polysorbate 80	0.1
Final pH 6.8 +/- 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 4°C.

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

Color and Clarity: Amber colored, clear solution without any precipitate.

#### Directions:

Suspend 32.1 g of B<sub>12</sub> Inoculum Medium in 1000 ml of distilled water. Boil to dissolve the medium completely.

Distribute the medium in tubes and sterilize by autoclaving at 15 lbs. pressure (121°C) for 15 minutes.

#### Principle and Interpretation:

This medium is formulated as per USP. It is rich in nutrients to support luxuriant growth of *Lactobacillus leichmannii* ATCC 7830.

Proteose peptone and yeast extract provide nitrogenous compounds, vitamins, carbon, sulphur and amino acids.

Dextrose is the fermentable sugars and potassium phosphate is the buffering agents. Polysorbate (Tween 80) is as a source of fatty acids and acts as special growth factor for lactobacilli. Tomato juice provides an acid environment favour acidophilic bacteria.

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

Organisms (ATCC)	Growth
<i>Lactobacillus leichmannii</i> (7830)	+++

#### References:

1. U.S. Pharmacopeia/National Formulary, USP XXII/NFXVII, (1990). U.S. Pharmacopeial Convention, Inc. Rockville, Maryland
2. American Type Culture Collection, Manassas, Va., U.S.A.