

# 1264 -YEAST EXTRACT (STD) TBL POWDER (Culture Media Ingredient)

### **INTENDED USE**

Yeast Extract (STD) TBL Powder is used in the preparation of culture media for the cultivation of a wide variety of microorganisms.

## PRODUCT SUMMARY AND EXPLANATION

Yeast Extract (STD) TBL Powder are concentrates of the water-soluble portion of Saccharomyces cerevisiae cells that have been autolyzed. These products provide essential water-soluble vitamins, amino acids, peptides and carbohydrates in microbiological culture media. Yeast Extract (STD) TBL Powder is considered a non-animal product and is used extensively for many nonanimal formulations of bacterial, fungal, mammalian and insect cell culture. It has been considered one of the most complete and versatile of the fermentation bionutrients available. It has been a valuable ingredient for the microbiological assay of vitamins

## **PRINCIPLE**

Yeast Extract Powder is prepared by drying yeast cells (Saccharomyces) extract specially grown for this purpose. It is a rich source of amino nitrogen. It provides vitamins, nitrogen, amino acids and carbon required for bacterial growth. It is used extensively for many non-animal formulations of bacterial, fungal, mammalian and insect cell culture.

## **INSTRUCTION FOR USE**

It is used as an additive for culture media and the microbiological assay of vitamins.

### **QUALITY CONTROL SPECIFICATIONS**

**Appearance** : Light yellowish free flowing powder having characteristic

yeast odor but not pungent smell.

Solubility (2% soln. at 25°C) : Completely soluble in distilled water, clear. Insoluble in

alcohol

Clarity (2% Soln. at 121°C) : Absolute clear solution. No ppt.

pH (2% Soln. at 25°C) 6.5 - 7.5Loss on drying (at 105°C) NMT - 6.0% NLT - 10.5% **Total Nitrogen (DWB)** α-Amino Nitrogen NLT - 4.5% **Total Ash** NMT - 15.0% Chloride (as NaCl) NMT - 1.0% Passes test **Microbial Test Growth Promotion Test** Passes test **Indole Test** Positive

TEST	SOLUTION	ORGANISM	ATCC	RESULT
Hydrogen Sulfide Production	1%	Salmonella Typhimurium	14028	Positive
Indole Production	1%	Escherichia coli	29552	Positive

## **INTERPRETATION**

Cultural Characteristic observed in 2% Yeast Extract (STD) TBL and 1.5% agar after incubation at 35-37°C for 18-24 hours.













Microorganism	ATCC	Inoculum (CFU/ml)	Growth
Staphylococcus aureus	25923	50-100	Good-Luxuriant
Escherichia coli	25922	50-100	Good-Luxuriant
Pseudomonas aeruginosa	27853	50-100	Good-Luxuriant
Bacillus subtilis	6633	50-100	Good-Luxuriant
Enterococcus faecalis	29212	50-100	Good-Luxuriant
Streptococcus pyogenes	19615	50-100	Good-Luxuriant
Lactobacillus casei	9595	50-100	Good-Luxuriant

### **PACKAGING:**

Standard packing is 500gm, in plastic bottle. After packing tightly closed in a dry and well- ventilated place.

### **STORAGE**

Store at room temperature in cool place, Keep plastic bottle tightly closed in a dry and well-ventilated place. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use.

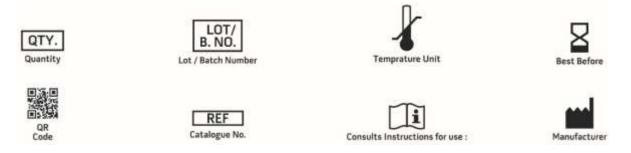
Product Deterioration: Do not use product if any contamination, discoloration or other sign of deterioration is found.

### **DISPOSAL**

After use, contact a licensed professional waste disposal service to dispose of this material. Dispose of as unused product.

## **REFERENCES**

- 1. U.S. Food and Drug Administration. 2001. Bacteriological analytical manual, online. AOAC International, Gaithersburg, Md.
- 2. Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
- 3. Wehr and Frank (ed.). 2004. Standard methods for the examination of dairy products, 17th ed. American Public Health Association, Washington, D.C.



**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

\*For Lab Use Only

Revision: 05th Oct. 2019









