

## 1265 -TRYPTOSE (STD) TBL POWDER.

### INTENDED USE

An enzymatic hydrolysate of protein that can replace meat infusion used in the preparation of culture media for the cultivation of fastidious organisms and for cell culture applications.

### PRODUCT SUMMARY AND EXPLANATION

Tryptose (STD) TBL Powder is very useful for cultivation of streptococci, pneumococci, meningococci and other fastidious organisms, and was found to be superior to meat infusion peptone media previously used for these organisms. It has been reported as beneficial for cell culture applications. Tryptose to be suitable for supplementing a serum-free medium to grow human diploid fibroblasts. Tryptose provided free amino acids necessary for growth of *Spodoptera frugiperda* and *Lymantria dispar* insect cell lines. Tryptose is often used as a biomass enhancer for recombinant *E. coli* production.

### PRINCIPLE

Tryptose (STD) TBL Powder is a mixed enzymatic hydrolysate with distinctive nutritional properties. It is designed to promote good luxuriant growth of highly fastidious microorganisms. Even though enzymically digested, it can be used in place of meat infusion to meet the nutritional requirements of fastidious microorganisms.

### INSTRUCTION FOR USE

It is used in the preparation of culture media for the cultivation of many fastidious microorganisms.

### QUALITY CONTROL SPECIFICATIONS

Appearance	:	Creamish to yellowish color, free flowing powder having characteristic odor but not pungent smell.
Solubility (2% soln. at 25°C)	:	Soluble in distilled Water, Clear. Insoluble in alcohol.
Clarity (2% Soln. at 121°C)	:	Clear solution. No ppt.
pH (2% Soln. at 25°C)	:	6.5 – 7.5
Loss on drying (at 105°C)	:	NMT – 6.0%
Total Nitrogen (DWB)	:	NLT – 12.5%
αAmino Nitrogen	:	NLT – 4.0%
Total Ash	:	NMT – 15.0%
Chloride (as NaCl)	:	NMT – 6.0%
Microbial test	:	Passes Test
Growth Promotional 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% Peptone Type-III and 1.5% agar after incubation at 35-37°C for 18-24 hours.

Microorganism	ATCC	Growth	Gas Production
<i>Escherichia coli</i>	8739	Luxuriant	Positive reaction
<i>Klebsiella aerogenes</i>	13048	Luxuriant	Positive reaction



<i>Salmonella enterica serovar Typhimurium</i>	14028	Luxuriant	Negative reaction
<i>Enterococcus faecalis</i>	29212	Inhibitted	-
<i>Staphylococcus aureus subsp.aureus</i>	19615	Inhibitted	-

## PACKAGING

Standard packing is 500gm, 5kg in plastic bottle & Drum. 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.

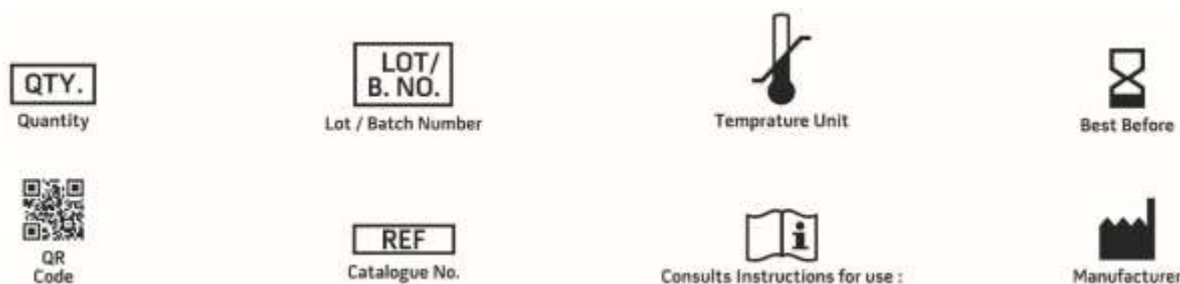
**Product Deterioration:** Do not use product if any contamination, discoloration or other sign of deterioration is found.

## DISPOSAL

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

## REFERENCES

1. Casman. 1942. A dehydrated medium to supplement meat infusion as a base for blood agar. J. Bacteriol. 43:33.
2. Casman. 1947. A noninfusion blood agar base for neisseriae, pneumococci and streptococci. Am. J. Clin. Pathol. 17:281-289.
3. Mobley, Chengappa, Kadel and Stuart. 1984. Effect of pH, temperature and media on acid and alkaline phosphatase activity in "clinical" and "nonclinical" isolates of Bordetella bronchiseptica. Can. J. Comp. Med. 48:175-178.
4. Litwin. 1985. Further studies on a tryptose based serum-free medium for human diploid fibroblasts. Dev. Biol. Stand. 60:25-33.



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

**\*For Lab Use Only**

Revision: 05<sup>th</sup> Oct. 2019