

1529 – TRYPTONE - R (General purpose for Bacteriology)

INTENDED USE

It is a Pancreatic Digest of Casein used for cultivation of fastidious and non-fastidious bacteria and fungi

PRODUCT SUMMARY AND EXPLANATION

Tryptone - R is a pancreatic digest of casein and as such composed of a mixture of amino acids, including essential amino acids, and larger peptides. Casein is the main protein of milk and is a rich source of amino acid nitrogen. Amongst all amino acids especially Tryptophan is present in high concentrations. Due to the rich nutritional properties, Tryptone is added to media as an accelerator to increase the yield of organisms and is recommended where a rapid and luxuriant growth of microorganisms is required. It is one of the components of the commonly used LB Broth for the growth of recombinant *Escherichia coli*. It is widely used as a supplement for microbiological culture media, as the hydrolysate is a good nutrient.

PRINCIPLE

Tryptone – R is an enzymatic digest of casein used as a nitrogen source in culture media. Casein is the main protein of milk, and a rich source of amino-acid nitrogen. It is rich in tryptophan, making it valuable for use in detecting indole production. The absence of detectable levels of carbohydrates in Tryptone – R makes it a suitable peptone in differentiating bacteria on the basis of their ability to ferment various carbohydrates.

INSTRUCTION FOR USE

It is used as a source of nitrogen in culture media for detection of fungi and some bacteria

QUALITY CONTROL SPECIFICATIONS

Appearance	:	Off white to creamish yellow colour, free flowing powder, having characteristic odour 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 – 5.0%
Total Nitrogen (DWB)	:	NLT – 12.0%
α-Amino Nitrogen	:	NLT – 2.0%
Total Ash	:	NMT – 10.0%
Chloride (as NaCl)	:	NMT – 5.0%
Microbial Parameter	:	Passes Test
Growth Promotion Test	:	Passes Test
Indole Test	:	Positive

TEST	SOLUTION	ORGANISM	ATCC	RESULT
Indole Production	1%	Escherichia coli	29552	Positive

INTERPRETATION

Cultural Characteristic observed in 2% Tryptone - R and 1.5% agar after incubation at 35-37°C for 18-24 hours.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth
<i>Staphylococcus aureus</i>	25923	50-100	Good - Luxuriant
<i>Escherichia coli</i>	25922	50-100	Good - Luxuriant



<i>Pseudomonas aeruginosa</i>	27853	50-100	Good - Luxuriant
<i>Bacillus subtilis</i>	6633	50-100	Good - Luxuriant
<i>Enterococcus faecalis</i>	29212	50-100	Good - Luxuriant
<i>Streptococcus pyogenes</i>	19615	50-100	Good - Luxuriant

PACKAGING:

Standard packing is 500gm, 5kg in plastic bottle & Drum. After packing tightly closed in a dry and well-ventilated place.

STORAGE

Keep plastic bottle tightly closed in a dry and well-ventilated place, Store in cool 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 plastic bottle after use.

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

DISPOSAL

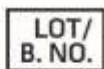
After use, contact a licensed professional waste disposal service to dispose of this material. Dispose of as unused product.

REFERENCES

1. Vanderzant, C., and D. F. Splittstoesser (eds.). 1992. Compendium of methods for the microbiological examination of food, 3rd ed. American Public Health Association, Washington, D.C.
2. www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalyticalmanualBAM/default.htm
3. Eaton, A. D., L. S. Clesceri, and A. E. Greenberg (eds.). 1995. Standard methods for the examination of water and wastewater, 9 th ed. American Public Health Association, Washington, D.C.
4. Marshall, R. T. (ed.). 1993. Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
5. United States Pharmacopeial Convention, Inc. 2008. The United States pharmacopeia 31/The national formulary 26, Supp. 1, 8-1-08, online. United States Pharmacopeial Convention, Inc., Rockville, Md.
6. U.S. Food and Drug Administration. 2001. Bacteriological analytical manual, online. AOAC International, Gaithersburg, Md .



Quantity



Lot / Batch Number



Temperature Unit



Best Before



QR Code



Catalogue No.



Consults Instructions for use :



Manufacturer

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

***For Lab Use Only**

Revision: 05th Oct. 2019