

# 1528 – SOYATONE –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

Soyatone —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**

Soyatone –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

Light yellowish colour free flowing powder having

characteristic odour of Soya.

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) 6.0 - 7.0Loss on drying (at 105°C) NMT – 6.0% **Total Nitrogen (DWB)** NLT - 9.5% α-Amino Nitrogen NLT - 1.5% **Total Ash** NMT - 10.0% Chloride (as NaCl) NMT - 5.0% **Microbial Parameter Passes Test Growth Promotion Test Passes Test** 

## **INTERPRETATION**

Cultural Characteristic observed in 2% Soyatone –R 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
Bacillus subtilis	6633	50-100	Good - Luxuriant
Salmonella typhimurium	14028	50-100	Good - Luxuriant
Saccharomyces cerevisiae	9763	50-100	Good - Luxuriant
Aspergillus niger	16404	50-100	Good - Luxuriant













Candida albicans	10231	50-100	Good - Luxuriant
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#### **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.

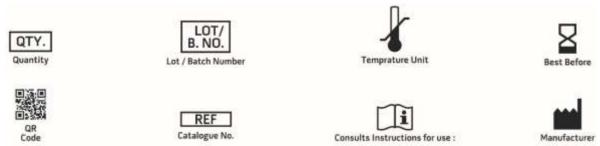
Product Deterioration: Do not use product if any contamination, discoloration or other sign of deterioration is found.

#### **DISPOSAL**

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

#### **REFERENCES**

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- 2. www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalyticalmanualBAM/default.ht m.
- 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



**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





