

51228 Tryptic Soy Broth No. 2 (TSB, Tryptone Soya Broth, CASO Broth, Soybean Casein digest Broth, Casein Soya Broth)

Highly nutrient medium for the general purpose, formulated according to USP, FDA and Eur. Phar. regulations. The growth performance is better suited for *Staphylococcus aureus* strains than catalog product 22092.

Composition:

| Ingredients | Grams/Litre |
|--------------------------------|-------------|
| Casein peptone | 17.0 |
| Soya peptone | 3.0 |
| Sodium chloride | 5.0 |
| Dipotassium hydrogen phosphate | 2.5 |
| Glucose | 2.5 |
| Final pH 7.3 +/- 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 2-25°C.

Directions:

Suspend 30 g of dehydrated media in 1 litre of purified filtered water. Heat with frequent agitation and boil for one minute. Sterilize at 121°C for 15 minutes. Cool to 45-50°C. Mix gently and dispense into sterile Petri dishes or sterile culture tubes.

Principle and Interpretation:

Casein peptone and soya peptone provide nitrogenous compounds and other essential nutrients. The peptones are different to the ones which are used in the traditional Tryptic Soy Broth (22092). The natural sugars from soya peptone and glucose are the sources for the fermentable carbohydrates. Sodium chloride maintains the osmotic balance and dipotassium hydrogen phosphate act as a buffer. Tryptone Soya Broth is often for the tube dilution method of antibiotic susceptibility testing. The addition of a small amount of agar (approx. 0.05-0.2% 05040, add before sterilisation) renders the broth suitable for the cultivation of obligatory anaerobes, such as *Clostridium* species. The superior growth-promoting properties of Tryptic Soy Broth make it especially useful for the isolation of organisms from blood or other body fluids. Anticoagulants such as sodium polyanetholesulfonate (81305) or sodium citrate (71635) may be added to the broth prior to sterilisation. 5 to 10 ml of blood may be added to 50 ml of medium.

Cultural characteristics after 24 hours at 35°C.

| Organisms (ATCC) | Growth | Remarks |
|--------------------------------|--------|-------------|
| Clostridium sporogenes (19404) | +++ | - |
| Escherichia coli (8739) | +++ | - |
| Staphylococcus aureus (6538) | +++ | - |
| Enterococcus faecalis (19433) | +++ | - |
| Pseudomonas aeruginosa (9027) | +++ | Green color |
| Candida albicans (10231) | + | - |
| Salmonella abony (NCTC 6017) | +++ | - |



References:

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- 2. R.G. Garison, Studies of the respiratory activity of Histoplasma Capsulatum, J. of infect.. Dis. 108: 120-124 (1961)
- 3. N.B. Mc Culloug, Laboratory tests in the diagnosis of brucellosis. Amer. J. of puplic health 39: 866-869 (1949)
- 4. Jean. F. Mac Faddin, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria. Vol. 1. Baltimore, MD.: Williams & Wilkins. (1985)
- 5. USP XXIII/NF XVIII, Microbial Limit Tests. Eu. Ph. (1998)
- 6. R.M. Atlas, L.C. Parks, Handbook of Microbiological Media, CRC Press (1993)
- 7. C. Vanderzant, O. Splittstoesser (Eds.), Compendium of Methods tor the Microbiological Examination of Foods, 3rd ed., APHA, Washington, DC (1992)
- 8. Eur. Pharmocopoeia, Chapter VIII. 3 (1998)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.



