DUOTEK®/MONOTEK® MEDIA

PRODUCTS:

Bottled Media:	DuoTek®	MonoTek®
Tryptic Soy Broth (TSB)	B8865	B8880

PURPOSE:

Tryptic Soy Broth is general purpose media that is used for the cultivation of a wide variety of organisms, including fastidious and nonfastidious microorganisms. It meets The U.S. Pharmacopeia (USP) Standards for use as a sterility test media and for use in performing microbiological examination of nonsterile products. Tryptic Soy or Soybean-Casein Digest Broth is included in standard methods for the examination of wastewater, water, and foods, and was chosen by the USDA Animal and Plant Health Inspection Service for detecting viable bacteria in live vaccines.

PRINCIPLE:

Tryptic Soy Broth is highly nutritious media and is commonly used as a base media for the cultivation of microorganisms. Casein and soy peptones in the media supply nutritious organic nitrogen, and sodium chloride maintains the osmotic equilibrium of the media.

The DuoTek® and MonoTek® Product lines are validated sterile to an SAL of 10^{-6}. The bottle material is a resin PET®. The optically clear bottle is lightweight and suitable for environmentally friendly disposal and cost effective shipping. The DuoTek® septum/screw cap combination allows both an injectable septum for liquid specimens as well as a wide-mouth screw cap opening (46 mm) for direct transfer of larger articles. The MonoTek® bottle has a wide-mouth opening but the cap has no septum.

Irradiation of the double packaged media allows this product to be used in critical environments where introduction of contaminants and particulates are not desired. Double bagged packaging with sterile inner packaging allows transfer of product into a classified clean room environment without the tedious process of disinfection. Each bottle is individually bagged. Five bottles are packed with an outer protective wrap.

FORMULA:

Approximate, per liter of deionized filtered water.

Tryptic Soy Broth:

Pancreatic Digest of Casein	17.0 g
Enzymatic Soy Digest	3.0
Dextrose	2.5
Sodium Chloride	5.0
Dipotassium Phosphate	2.5

Final pH 7.3 +/- 0.2 at 25°C

PRECAUTIONS:*

For laboratory use only. Observe approved biohazard precautions.

Storage: Upon receipt store at 2-25°C away from light. Media should not be used if there are signs of contamination, deterioration (i.e. leaking, cracking, or discoloration), violation of package seal, or if the expiration date has passed. Do not open outer wrapping until ready to use. Media can be inoculated up to the expiration date and incubated for the appropriate incubation period up to 14 days.

Limitations: Tryptic Soy Media are nonselective media; for definitive identification of microorganisms, subculturing to plate media may be necessary as well as biochemical/DNA testing. See appropriate references.

No single assay can characterize completely the microbial contamination in a specific area. A complete contamination control program should emphasize traffic control, special dress code procedures in critical areas, suitable ventilation, as well as good cleaning and disinfecting practices.

PROCEDURE:*

Specimen Collection: Information on specimen collection is found in standard reference material.

Method of Use: If sterility of the inner packaging is required, appropriate procedures should be used to minimize or eliminate risks. Inner package must not be opened until ready to use. The DuoTek® bottle may be inoculated through the septum, or the cap may be removed for addition of larger objects. The MonoTek® bottle is used by removing the cap.

Inoculate using USP microorganisms or other appropriate reference guidelines. Incubate aerobically 1-3 days at 32.5°C +/- 2.5°C for bacteria. Incubate yeast and fungus at 22.5°C +/- 2.5°C for 1 to 5 days.

Interpretation:

Visually examine the broth for turbidity, streaks, or "puff ball" growth. Confirm growth of microorganisms with Gram's stain and/or subculture onto plated media. Colonies that require further identification should be subcultured for purity and then tested by biochemical, serological, and microscopic means.[1,3,4]

Materials Required but Not Provided: Standard supplies and equipment commonly found in a microbiological laboratory are not provided.

QUALITY CONTROL:*

Microorganism (ATCC #):	**Expected Results:**
**Bacillus subtilis* (6633)	Growth
**Candida albicans* (10231)	Growth
**Aspergillus niger* (16404)	Growth
**Staphylococcus aureus* (6538)	Growth
**Pseudomonas aeruginosa* (9027)	Growth

*USP recommended test organism; inoculated with less than 100 colony forming units.

User Quality Control: Check for signs of contamination and deterioration (color, clarity). Tryptic Soy Broth should appear clear, and light amber in color. For more detailed information, consult appropriate references or regulatory guidelines.

. **BIBLIOGRAPHY:**

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4. Murray, P. R., et al., *Manual of Clinical Microbiology*, 8th ed., American Society for Microbiology, Washington D.C., 2003.
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6. Sutter, V. L., et al., *Anaerobic Bacteriology Manual*, UCLA, University Extension and the School of Medicine, 1975
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