#### TSB CAP 4 with Tween 80

#### **Intended Use**

TSB CAP 4 with Tween 80 for determining efficiency of sanitization of containers, equipment surfaces, water miscible cosmetics etc.

## **Summary & Principle**

Pancreatic digest of casein, papaic digest of soyabean meal and peptone provides nitrogenous compounds, amino acids and long chain peptides for the growth of microorganisms. Dextrose is the source of carbohydrate. Sodium chloride maintains the osmotic balance. Dipotassium hydrogen phosphate buffers the medium. Soya lecithin, polysorbate 80 (Tween 80) and tamol act as neutralizing agents that neutralizes the activity of antimicrobial agents. Lecithin and polysorbate 80 neutralizes quaternary ammonium compounds, parahydroxy benzoates and substituted phenolics. Collection of samples from areas before and after the treatment with disinfectant evaluates cleaning procedures in environmental sanitation.

## Formula\*

Ingredients PART A	g/L
Tryptone	17.0
Peptone	2.5
Soya Peptone	3.0
Sodium Chloride	5.0
Dipotassium Hydrogen Phosphate	2.5
Dextrose (Glucose)	2.5
Soya Lecithin	5.0
Tamol	7.5

#### PART B

Tween 80	35 ML
Final pH (at 25°C)	$7.3 \pm 0.2$
*Adjusted to suit performance para	ameters.

## Storage and Stability

Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

# Type of specimen

Cosmetics

# **Specimen Collection and Handling**

Ensure that all samples are properly labelled.

Follow appropriate techniques for handling samples as per established guidelines.

25 ---1

Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure The samples must be stored and tested within the permissible time duration.

After use, contaminated materials must be sterilized by autoclaving before discarding.

#### **Directions**

- 1. Suspend 45.00 g of Part A in 800 mL purified / distilled water.
- 2. Separately add 35 mL of Part B in 100 mL purified / distilled water.
- 3. Mix well and add to Part A solution. Make up the volume to 1000mL.
- 4. Heat if necessary, to dissolve the medium completely.
- 5. Mix well and dispense in test tubes or flasks or as desired. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

**Note:** Medium may show haziness after sterilization but on cooling the medium becomes clear.

# **Quality Control**

Dehydrated Appearance: Part A: Cream to yellow coloured, homogeneous, free flowing powder.

Part B: Yellow to amber coloured, viscous solution.

Prepared Appearance: Light to medium amber coloured, clear to slightly opalescent solution.

Cultural Response: Cultural characteristics observed after an incubation of 18-24 hours at 30°C-35°C.

# **Growth Promoting:**

Organisms (ATCC) Staphylococcus aureus subsp.	<b>Growth</b> Good
aureus (6538) Pseudomonas aeruginosa (9027) Escherichia coli (8739)	Good Good
Salmonella enterica subsp. enterica serovar Typhimurium (14028)	Good
Salmonella enterica subsp. enterica serovar Abony (NCTC 6017)	Good
Candida albicans 3147 (10231) Bacillus spizizenii (6633)	Good Good

**Note:** Inoculum for Good growth is 10 – 100 cfu.

#### **Performance and Evaluation**

Performance of the product is dependent on following parameters as per product label claim:

- 1. Directions
- 2. Storage
- 3. Expiry

### Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

# Reference

- 1. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- 2. Hall and Hartnett, 1964, Public Health. Rep., 79:1021.
- 3. Murray PR, Baron, Pfaller, and Yolken (Eds.), 2003, In Manual of Clinical Microbiology, 8th ed., ASM, Washington, D.C
- 4. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
- 5. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

## **Product Presentation:**

Cat No.	Product description	Pack Size
201200370500	Dehydrated Culture Media	500 g

# Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.