

## Technical Data Sheet

# Modified Tween<sup>®</sup>-Lethen Broth

Ordering number: 1.46353.0006

Modified Tween<sup>®</sup>-Lethen-Broth is designed for the enumeration of fastidious microorganisms in the presence of disinfectant residues.

Modified Tween<sup>®</sup>-Lethen-Broth is available in different filling volumes and with various locking mechanisms:

- Modified Tween<sup>®</sup>-Lethen Broth (article number 146353): 275 ml-bottle with **wide mouth**, filling volume 90 ml
- Modified Tween<sup>®</sup>-Lethen Broth (article number 146496): 125 ml-bottle with **screw cap**, filling volume 90 ml
- Modified Tween<sup>®</sup>-Lethen Broth (article number 146487): 250 ml-bottle with **screw cap**, filling volume 90 ml
- Modified Tween<sup>®</sup>-Lethen Broth (article number 146497): 500 ml-bottle with **screw cap**, filling volume 300 ml

### Mode of Action

The nutritional content is significantly improved compared to the Lethen-Broth, with the increase of meat peptone concentration and the addition of casein and yeast extract as a source of vitamins. Also, the efficacy of the inactivating agents is improved by the addition of sodium thiosulfate (neutralizes iodine and chlorine) and sodium bisulfite (neutralizes formaldehyde, formaldehyde releasers and Glutaraldehyde).

### Typical Composition

Meat Peptone	20 g/l
Casein peptone	5 g/l
Meat Extract	5 g/l
Yeast Extract	2 g/l
NaCl	5 g/l
Sodium Bisulfite	0.1 g/l
Lecithin	0.7 g/l*
Polysorbate (Tween <sup>®</sup> ) 80	15 ml/l
Sodium Thiosulfate	1 g/l*

\* 10 g/l Lecithin and no Sodium Thiosulfate in 146353

The appearance of the medium is clear and yellowish (turbid and yellow-brown for 146353). The pH value is in the range of 7.0-7.4. The medium can be adjusted and/or supplemented according to the performance criteria required.

### Application and Interpretation

The broth is aerobically incubated for 24-48 hours at 30-35 °C. For testing for molds the broth should be incubated for up to 3 weeks.

In the case of growth, it is recommended to identify the microorganisms with appropriate microbiological methods (e.g. selective media and biochemical testing.)

### Storage and Shelf Life

The product can be used for sampling until the expiry date if stored upright, protected from light and properly sealed at +2 °C to +25 °C.

The testing procedures as described on the CoA can be started up to the expiry date printed on the label.

### Disposal

Please mind the respective regulations for the disposal of used culture medium (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

### Quality Control

Control Strains	ATCC #	Inoculum CFU	Incubation	Expected Results
<i>Staphylococcus aureus</i>	6538	~100	20-24 h at 35-37 °C	good growth; pronounced turbidity
<i>Escherichia coli</i>	8739	~100	20-24 h at 35-37 °C	good growth; pronounced turbidity
<i>Pseudomonas aeruginosa</i>	9027	~100	20-24 h at 35-37 °C	good growth; pronounced turbidity
<i>Escherichia coli</i> + 200 µl Aerodesin 2000	8739	~100	20-24 h at 35-37 °C	good growth; pronounced turbidity
<i>Candida albicans</i>	10231	~100	44-48 h at 20-25 °C	good growth

Please refer to the actual batch related Certificate of Analysis.

### Literature

Weber, G. R., and L. A. Black. 1948. Relative efficiency of quaternary inhibitors. Soap and Sanit. Chem. 24:134-139.

Tomlinson, L. (ed.). 1992. FDA Bacteriological Analytical Manual, 7th ed. AOAC International, Arlington, VA.

Quisno, R., I. W. Gibby, and M. J. Foter. 1946. A neutralizing medium for evaluating the germicidal potency of the quaternary ammonium salts. Am. J. Pharm. 118:320-323.

Erlandson, A. L., Jr., and C. A. Lawrence. 1953. Inactivating medium for hexachlorophene (G-11) types of compounds and some substituted phenolic disinfectants. Science 118:274- 276. 8.



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Brummer, B. 1976. Influence of possible disinfectant transfer on Staphylococcus aureus plate counts after contact sampling. Appl. Environ. Microbiol. 32:80-84. 9.

Favero (chm.). 1967. Microbiological sampling of surfaces-a state of the art report. Biological Contamination Control Committee, American Association for Contamination Control.

## Ordering Information

Product	Cat. No.	Pack size
Modified Tween®-Letheen Broth	1.46487.0006	6 x 90 ml bottle
Modified Tween®-Letheen Broth	1.46353.0006	6 x 90 ml bottle
Modified Tween®-Letheen Broth	1.46496.0010	10 x 90 ml bottle
Modified Tween®-Letheen Broth	1.46497.0006	6 x 300 ml bottle

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