Tryptic Soy Agar with Lecithin and Tween 80
SKU: 700002991,700002992,700002993,700002994
NCM0011

Intended Use
Tryptic Soy Agar with Lecithin and Tween 80 is used for the isolation of microorganisms from surfaces sanitized with quaternary ammonium compounds and is not intended for use in the diagnosis of disease or other conditions in humans.

Description
In 1955, Leavitt et al. discovered Tryptic Soy Agar supported excellent growth of aerobic and anaerobic microorganisms. Tryptic Soy Agar is a nutritious base and a variety of supplements are added to enhance the medium, including Lecithin and Tween 80. The Lecithin and Tween 80 inactivate some preservatives that may inhibit bacterial growth, reducing “preservative carryover”. Tryptic Soy Agar with Lecithin and Tween 80 is recommended for determining the sanitation efficiency of containers, equipment, and work area (environmental monitoring).

Typical Formulation

Enzymatic Digest of Casein	15.0 g/L
Enzymatic Digest of Soybean Meal	5.0 g/L
Sodium Chloride	5.0 g/L
Lecithin	0.7 g/L
Tween 80	5.0 g/L
Agar	20.5 g/L

Final pH: 7.3 ± 0.2 at 25ºC
Formula is adjusted and/or supplemented as required to meet performance specifications.

Precaution
Refer to SDS

Preparation
1. Suspend 51.2 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121ºC for 15 minutes.
4. Cool to 45-50ºC.

Test Procedure
Refer to appropriate references for specific procedures using Tryptic Soy Agar with Lecithin and Tween 80 or environmental monitoring.

Quality Control Specification
Dehydrated Appearance: Powder is homogeneous, lumpy, and beige.

Prepared Appearance: Prepared medium is trace to moderately hazy and yellow-beige.

620 Lesher Place • Lansing, MI 48912
800-234-5333 (USA/Canada) • 517-372-9200
foodsafety@neogen.com • foodsafety.neogen.com

Expected Cultural Response: Cultural response on Tryptic Soy Agar with Lecithin and Tween 80 incubated aerobically at 33-35ºC and examined for growth after 18 - 48 hours.

Microorganism	Approx. Inoculum (CFU)	Expected Results
Aspergillus brasiliensis ATCC® 16404	50-100	50-200% Recovery
Bacillus subtilis ATCC® 6633	50-100	50-200% Recovery
Candida albacans ATCC® 10231	50-100	50-200% Recovery
Clostridium sporogenes ATCC® 11437	50-100	50-200% Recovery
Enterococcus faecalis ATCC® 19433	50-100	50-200% Recovery
Escherichia coli ATCC® 25922	50-100	50-200% Recovery
Pseudomonas aeruginosa ATCC® 27853	50-100	50-200% Recovery
Pseudomonas aeruginosa ATCC® 9027	50-100	50-200% Recovery
Salmonella typhimurium ATCC® 14028	50-100	50-200% Recovery
Staphylococcus aureus ATCC® 6538	50-100	50-200% Recovery
Staphylococcus epidermidis ATCC® 12228	50-100	50-200% Recovery

The organisms listed are the minimum that should be used for quality control testing.

Results
Refer to appropriate references for test results.

Expiration
Refer to expiration date stamped on the container. The dehydrated medium should be discarded if not free flowing, or if appearance has changed from the original color. Expiry applies to medium in its intact container when stored as directed.

Limitations of the Procedures
Due to nutritional variation, some strains may be encountered that grow poorly or fail to grow on this medium.

Storage
Store dehydrated culture media at 2 – 8°C away from direct sunlight. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

References

1. Leavitt, J. M., I. J. Naidorf and P. Shugaevsky. 1955. The undetected anaerobe in endodontics: a sensitive medium for detection of both aerobes and anaerobes. The NY J. Dentist. 25:377-382.
2. Orth, D. S. 1993.Handbook of cosmetic microbiology. Marcel Dekker, Inc., New York, NY.
3. 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.
4. 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.
5. Brummer, B. 1976. Influence of possible disinfectant transfer on *Staphylococcus aureus* plate counts after contact sampling. App. Environ. Microbiol. 32:80-84.
6. Favero (chm.). 1967. Microbiological sampling of surfaces – a state of the art report. Biological Contamination Control Committee, American Association of Contamination Control.

620 Lesher Place • Lansing, MI 48912
800-234-5333 (USA/Canada) • 517-372-9200
foodsafety@neogen.com • foodsafety.neogen.com