

Soyabean Casein Digest Agar (Tryptone Soya Agar)

Intended Use

Soyabean Casein Digest Agar (Tryptone Soya Agar) is a general-purpose medium for isolation and cultivation of a wide variety of fastidious and non-fastidious microorganisms.

Summary

Soyabean Casein Digest Agar (SCDA) is used for total aerobic microbial count and antimicrobial preservative effective test. It is also used for testing bacterial contaminants in cosmetics and for a multitude of purpose including maintenance of stock cultures, plate counts, phage typing, colicin typing and as a base for media containing blood. Since this medium does not contain the X and V growth factors, it can be used for determining the requirements of these growth factors by isolates of *Haemophilus*. Gunn *et al.*, used this medium for the study of haemolytic reactions after addition of 5% v/v blood. When Chocolate Agar is prepared, this medium supports good growth of *Neisseria* species and *Haemophilus influenzae*. Soyabean Casein Digest Agar is included in the Bacteriological Analytical Manual for food and cosmetics testing, in the Compendia of Methods for the examination of milk, water, wastewater and foods and is also specified in the USP and IP.

Principle

The combination of pancreatic digest of casein and papaic digest of soyabean makes the medium highly nutritious by supplying organic nitrogen, particularly amino acids and long chain peptides. Sodium chloride maintains the osmotic balance. Soyabean Casein Digest Agar may be supplemented with blood to provide a more nutritious medium for fastidious organisms, or with antimicrobials to provide a selective medium for specific organisms out of a mixed flora sample. Since Soyabean Casein Digest Agar contains no added carbohydrate, it may be used with added blood to determine haemolysis. When Soyabean Casein Digest Agar is supplemented with 0.7 g lecithin and 5 g polysorbate (Tween 80) per liter of medium, it can be used as microbial content test agar for testing quaternary ammonium compounds (collection of samples from identical areas before and after treatment with disinfectant yields data useful in evaluating cleaning procedures in environmental sanitation).

Formula*

Ingredients	g/L
Pancreatic Digest of Casein	15.0
Papaic Digest of Soyabean	5.0
Sodium Chloride	5.0
Agar	15.0
Final pH (at 25°C)	7.3 ± 0.2

*Adjusted to suit performance parameters.

Directions

1. Loosen the cap.
2. Melt the medium completely in a water bath at 100°C. Do not remove the cap of the bottle while melting.
3. Cool to 45°C-50°C, mix well and pour into presterile petriplate.

Quality Control

Appearance: Light yellow coloured, slightly opalescent gel.

Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP and growth is observed after an incubation at 30°C- 35°C for ≤ 3 days for bacteria and ≤ 5 days for fungi.

Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time, inoculating ≤ 100 cfu of the appropriate organism.

Organisms (ATCC)	Growth
<i>Escherichia coli</i> (8739)	Good
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (6538)	Good
<i>Pseudomonas aeruginosa</i> (9027)	Good
<i>Bacillus spizizenii</i> (6633)	Good
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i> (14028)	Good
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Abony</i> (NCTC 6017)	Good
<i>Candida albicans</i> 3147 (10231)	Good
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good

Note: For good growth - Growth obtained on the test media should not differ by a factor greater than 2 from calculated value for a standardized inoculum.
Inoculum cfu for good growth is 10-100.

Remarks

1. Do not use media bottles that exhibit any damage, cracks, microbial contamination, discoloration, drying or other sign of deterioration.
2. Ensure that the temperature of water bath is at 100°C so that the medium melts completely. Cooler water baths give rise to lumpy, uneven medium.
3. Before pouring into sterile petriplates, gently swirl the bottle to check whether the entire contents are properly mixed and melted.
4. Good laboratory practices and hazard precautions must be observed at all times.
5. After use media containers, prepared plates, sample, sample containers and other contaminated materials must be sterilized or incinerated before discarding.

Storage and Stability

1. Store the ready to use Soyabean Casein Digest Agar (Tryptone Soya Agar) at 15°C-25°C in a cool, dry place away from light.
2. Stability of the kit is as per expiry date mentioned on the label.

Limitations

1. Haemolytic reactions of Streptococci on this medium can vary according to the origin of the blood.
2. The medium designed for sheep blood shows significant differences when used with horse blood and vice versa.

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.

References

1. US Food and Drug Adm; 1998, Bacteriological Analytical Manual, 8th Ed; Rev. A, AOAC, International, Gaithersburg, Md.
2. H. Wehr and J. Frank, 2004, Std. Methods for The Examination of Dairy Products, 17th Edition; APHA, Washington, DC.
3. Greenberg AE; Clesceri LS and Eaton AD (Eds), 1998, Std Methods for The Examination of Water and Wastewater, 20th edition, APHA, Washington, DC.
4. Downes and Ito (ed.) 2001, Compendium of Methods for The Microbiological Examination of Foods, 4th edition, APHA Washington DC.
5. IP, 1996, Ministry of Health and Family Welfare, Govt. of India, Vol. 2.
6. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:**Cat. No.**

203190580100

203190580250

203190580500

Product Description

Bottle Media

Bottle Media

Bottle Media

Pack Size

100 mL

6 x 250 mL

500 mL

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.
