

Tryptic Soya Agar (VEG) Plate (Triple Layer Pack, Gamma-Irradiated)

Intended Use

Tryptic Soya Agar (VEG) Plate is a general-purpose medium used for cultivation of a wide variety of microorganisms and for environmental monitoring in sterile area. It is free of any material derived from animals.

Summary

Gamma irradiated Tryptic Soya Agar (VEG) Plate is a general-purpose, nonselective media plates, providing enough nutrients to allow for a wide variety of microorganisms to grow. They are used for a wide range of applications, including culture maintenance, enumeration (counting), isolation of pure cultures and for routine microbial limit testing. Gamma Irradiated Tryptic Soya Agar (VEG) plates are used for the environmental monitoring of microbial contamination in clean room areas.

Principle

Gamma Irradiated (VEG) Plates are Tryptic Soya Agar Triple - layer packed in stacks of five plates. The presence of an irradiation indicator enables the rapid and easy visual confirmation by the cleanroom operator that the medium is irradiated. Each pack (media and their wrappings) receives an irradiation dose between 23 to 32 kGy to guarantee that no viable contaminants are present.

Tryptic Soya Agar (VEG) is formulated by Veg hydrolysate and papaic digest of soyabean meal which makes this media nutritious by providing amino acids and long chain peptides for the growth of microorganisms. Dextrose is the energy source. Sodium chloride maintains the osmotic balance, while dibasic potassium phosphate acts as buffer to maintain pH. Agar is used as a gelling agent.

Formula*

Ingredients	g/L
Veg Hydrolysate	17.0
Papaic Digest of Soyabean Meal	3.0
Sodium Chloride	5.0
Dextrose	2.5
Dibasic Potassium Phosphate	2.5
Glycerol	1.0
Agar	15.0

*Adjusted to suit performance parameters.

Additional Material Required

Air Sampler – AccuBas Ax2, Bacteriology Incubator, Anaerobic Container / Anaerobic Culture jar, Anaerobic Gas Pack & Anaerobic Indicator Strip.

Instruction for use

1. Open the sterile pack and remove Tryptic Soya Agar (VEG) plates aseptically.
2. Inoculate/streak the plate as per standard procedure.
3. Sampling:
 - I. For settle plate, expose the plates for 4 hours. During exposure, care should be taken for complete exposure of media.
 - II. For dynamic air sampling, use air sampler.
4. Incubate the plates in inverted position as per standard guidelines.

Reading and interpretation

1. After incubation, observe the microbial growth and count the colonies.
2. Interpretation is assured by user.
3. User is responsible to define the action limits as per standard guidelines and alert limits on the basis of trend analysis & other relevant data.

Quality Control

Appearance: Gel with smooth and even surface without any cracks, bubbles and drying or shrinking of media.

Colour of Medium: Light amber coloured, very slightly opalescent gel in petriplates.

Quantity of Medium: 29 ± 2 g in 90 mm petriplate.

pH at 25°C ± 2°C: 7.3 ± 0.2

Gamma Irradiation: The above said product was Gamma Irradiated between 23KGy - 32KGy.

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 at 30°C-35°C and 20°C-25°C for ≤ 5 days for fungi.

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

Organism (ATCC)	Growth	Incubation Temperature	Incubation Period
<i>Escherichia coli</i> (8739)	Good	30°C-35°C	18 Hours
<i>Staphylococcus aureus</i> subsp. <i>aureus</i> (6538)	Good	30°C-35°C	18 Hours
<i>Pseudomonas aeruginosa</i> (9027)	Good	30°C-35°C	18 Hours
<i>Bacillus spizizenii</i> (6633)	Good	30°C-35°C	18 Hours
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Abony</i> (NCTC 6017)	Good	30°C-35°C	18 Hours
<i>Salmonella enterica</i> subsp. <i>enterica</i> serovar <i>Typhimurium</i> (14028)	Good	30°C-35°C	18 Hours
<i>Candida albicans</i> 3147 (10231)	Good	30°C-35°C	24 Hours
<i>Candida albicans</i> 3147 (10231)	Good	20°C-25°C	48 Hours
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good	30°C-35°C	48 Hours
<i>Aspergillus brasiliensis</i> WLRI 034(120) (16404)	Good	20°C-25°C	72 Hours

Note: For Good growth - growth obtained on test media should not differ by a factor greater than 2 from calculated value for a standardized inoculum.

Storage and Shelf Life

1. Store between 15°C-25°C to avoid water condensation. Condensation can be prevented by avoiding quick temperature shifts and mechanical stress.
2. Under optimal conditions, the medium has a shelf life of 6 months. Use before expiry mentioned on the label.

Reference

1. USP Chapter 1116: microbiological evaluation of cleanrooms and other controlled environments.
2. USP Chapter 61: Microbiological Examination of Nonsterile Products: Microbial enumeration Tests.
3. USP Chapter 62: Microbiological Examination of Nonsterile Products: Tests for Specified Microorganism.
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product	Pack Size
205200520100	Tryptic Soya Agar (VEG) Plate	100 Plates

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.