## 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.

#### 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 storage, enumeration (counting), isolation of pure cultures and for routine microbial limit testing.

#### **Principle**

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.

55 mm contact plates are designed for the microbiological testing of surfaces and personnel. The convex agar or dome shape allows direct application of culture media plate to the test surface for sampling its microbial burden, such as walls, floors, utensils, or personnel for hygiene monitoring.

After touching the surface to be sampled with the medium, the 55 mm contact plate is covered and incubated at an appropriate temperature. The presence and number of microorganisms is determined by the appearance of colonies on the surface of the agar medium. Collection of samples from the same area before and after cleaning and treatment with a disinfectant permits the evaluation of the efficacy of sanitary procedures.

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	
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.

#### Instructions for use

- 1. Open the sterile pack and remove Tryptic Soya Agar (VEG) Plate, aseptically.
- 2. For sampling of surfaces, equipment or personnel, apply the agar directly onto the surface to be tested, ensuring that an even pressure is distributed over the whole plate for 10 seconds.
- 3. Clean the surface where the sample was taken in order to remove any possible traces of agar.
- 4. Incubate the plates in inverted position as per standard procedure.

#### **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, convex surface without any cracks, bubbles and drying or shrinking of media. **Colour of Medium:** Light yellow coloured, very slightly opalescent gel in 55 mm plates.

**Quantity of Medium:**  $15.5 \pm 1$  g media in 55 mm plate.

## **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  $\leq$  3 days for bacteria and at 30°C-35°C and 20°C-25°C for  $\leq$  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  $\leq$  100 cfu of appropriate microorganism.

Growth Promoting	Crowth	Incubation Townsystum	Incubation Daried
Organism (ATCC)	Growth	Incubation Temperature	Incubation Period
Bacillus spizizenii (6633)	Good	30°C-35°C	18 Hours
Candida albicans 3147 (10231)	Good	30°C-35°C	24 Hours
Candida albicans 3147 (10231)	Good	20°C-25°C	48 Hours
Aspergillus brasiliensis WLRI	Good	30°C-35°C	48 Hours
034(120) (16404)			
Aspergillus brasiliensis 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. ISO 14698-1 (2003). Cleanrooms and associated controlled environments. Biocontamination control. Part 1: General principles and methods.
- 2. ISO 18593 (2004). Microbiology of food and animal feeding stuffs Horizontal methods for sampling techniques from surfaces using contact plates and swabs.
- 3. USP chapter 1116: microbiological evaluation of cleanrooms and other controlled environments.
- 4. USP Chapter 61: Microbiological Examination of Nonsterile Products: Microbial enumeration Tests.
- 5. USP Chapter 62: Microbiological Examination of Nonsterile Products: Tests for Specified Microorganism.
- 6. Data on file: Microxpress, a division of Tulip Diagnostics (P) Ltd.

#### **Product Presentation:**

Cat No.	Product
205200570200	Tryptic Soya Agar (VEG) Plate

Pack Size 200 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.