

Envirocheck® Settle plates Tryptic soy agar with Neutralizers

Mode of Action

Envirocheck® Settle plates Tryptic soy agar with Neutralizers (TSA)

Envirocheck® Settle plates Tryptic Soy agar are used to check the determination of airborne micro organisms (Total colony count) by active air sampling in combination with the different MAS - 100® Microbial Air Monitoring Systems (for further information concerning our Air Monitoring program, please refer to our brochure "MAS-100® Microbial Air Monitoring Systems, W286138) or by passive air sampling by the sedimentation method.

The composition of the base culture medium complies with the recommendations of the United States Pharmacopeia and the European Pharmacopeia.

In order to inactivate accumulated H₂O₂ during active air sampling, the base medium (Tryptic soy agar) additionally contains 4 neutralizing agents.

- 90 mm diameter plates
- Storage at +15°C to +25°C
- Gamma irradiated
- Triple wrapped - (2 sets of 10 plates each)
- H₂O₂ -impermeable inner bag
- 4 neutralizers
- Reduced formation of condensation water
- Long incubation time possible
- 25 ml filling volume

Typical composition (g/l)

Peptone from casein 15.0; peptone from soymeal 5.0; sodium chloride 5.0; agar-agar 15.0, tween 80 5.0; lecithin 0.7; histidine 0.5; sodium thiosulfate 0.5.

pH: 7.3 ± 0.2 at 25 °C.

The appearance of the medium is clear and yellowish.

Quality control

Test strains	Recovery rate
Incubation 24 h 33-35° C; aerobic	
Staphylococcus aureus ATCC 6538	≥ 50 %
Escherichia coli ATCC 8739	≥ 50 %
Pseudomonas aeruginosa ATCC 9027	≥ 50 %
Bacillus subtilis ATCC 6633	≥ 50 %
Incubation 48 h 20-25° C; candida	
Candida albicans ATCC 10231	≥ 50 %
Incubation 72 h 20-25° C; aspergillus	
Aspergillus niger ATCC 16404	≥ 50 %
Sterility	
Irradiation dose 9 -20 kGy	no growth

Experimental Procedure and Evaluation

(Active air sampling with MAS-100®; Merck Cat. No. 1.09090.0001)

- Open the outer wrapping one before and one in the airlock entrance of the protected area - in the protected area remove the third wrapping.
- Place the MAS-100® on a firm support
- Open the perforated lid (with attached dust cover) by rotating counter clockwise.
- Place a closed Envirocheck® Settle plate on top of the dish support.
- Take the lid off the settle plate
- Close the perforated lid.
- The sampling head can be adjusted to any angle from horizontal to vertical airflow direction.
- Program the MAS-100® according to the manual.
- Start active air sampling

Count the number of typical colonies on the contact plates directly after specified incubation period; the MAS-100® runs with 100 litres/min. , the calculated impaction speed is approx. 11 m/sec. with the sampling head with 400 holes with a diameter of 0.7 mm, therefore be sure to use 400x0.7 mm FELLER conversation table. Confirm the counted Microorganisms, if necessary, according to the microorganisms sought.

Shelf life in month

9 month

Storage

+15°C to +25°C

Ordering information

Product	Merck Cat. No.	Pack size
Envirocheck® Settle plates Tryptic soy agar with neutralizers (TSA)	1.18410.0020	20 plates (2 x 10 plates)