

PASSIVE SAMPLING, COMBINED WITH ACTIVE SAMPLING, IS RECOGNIZED BY REGULATORY ORGANIZATIONS AS USEFUL IN ASSESSING THE MICROBIAL QUALITY OF THE AIR ENVIRONMENT.

THE DIFFERENCE BETWEEN ACTIVE AIR SAMPLING AND PASSIVE AIR SAMPLING

The Active Method: a predetermined volume of air is drawn onto an agar plate at a controlled rate of speed.

An active air sampler provides an estimate of the number of microorganisms impacted onto an agar plate, free-floating or carried on particles, within a given size, within a cubic meter of air.

The Passive Method: a static agar plate provides an indication of any microorganisms which might settle out of the air due to gravitational effects.

Open agar plates are exposed to the environmental air for a length of time. The number of agar plates placed in the environment, and the exposure time, depends on the risk evaluation. The suggested media is Tryptic Soy Agar (TSA). The microorganism population that settles on the agar plates are counted and evaluated. Passive sampling is simpler and less expensive compared to active sampling, which requires a device. Passive sampling produces an indication of the settling microbial population; active sampling produces a reliable quantification.

CFU/Exposure time: WHO World Health Organization. The tables below are based on World Health Organization's guide on monitoring the environment in vaccine manufacturing facilities with a maximum exposure time of 4 hours (90 mm Petri dishes).

CLEANROOM GRADE	PASSIVE SAMPLING EXPOSURE TIME: 4 HOURS
A	CFU <1
B	CFU 5
C	CFU 50
D	CFU 100

EN 17141:2020 Cleanroom – Biocontaminaton Control

EXPRESSION OF RESULTS

The number of CFU per plate, per time
(e.g. CFU/settle plate/4 H)

DESCRIPTION

The TRIO.SETTLE consists of:

- AISI316 stainless steel fabrication
- Upper surface disc to accommodate the open culture plate during sampling
- Lower surface disc to accommodate the lid of the culture plate
- Articulate system to obtain different inclinations to the agar surface related to the direction of unidirectional airflow, avoiding laminar flow turbulence
- System to fix the TRIO.SETTLE to a tripod or a base
- Floor base

PERFORMANCES

The TRIO.SETTLE ideally standardizes the position of the culture plate and reduces the risk of contamination during sampling.

REFERENCES

Annex C – C.3.3 Settle plate

IDENTIFICATION CODE

Code	TRIO.SETTLE
367	s/s TRIO.SETTLE table plate stand – size: diam 12 x 20H cm.
368	s/s TRIO.SETTLE floor plate stand – size: base diam. 25 x 110H cm.



TRIO.SETTLE floor plate stand

