

# SPORE TRAPS

## Allergenco D™



Allergenco D™ is a linear spore trap with an impaction trace of 1.1mm x 14.4 mm. It is used for the collection of airborne bio-aerosols including fungi, pollen and particulates. Spore traps are appropriate for air sampling at the beginning of an investigation to set a baseline and as a final check for clearance sampling. They can also be used for monitoring during the remediation process.

A suitable pump, capable of drawing 15 liters of air per minute, is attached to the cassette that contains a slide, where the impaction trace is formed. The cassette is sent to the lab where it is disassembled and the slide is stained and examined.

Sampling times depend upon the environment being sampled. The table below has suggested times for various environmental conditions.

Suggested Sampling Times		
Environment	Flow Rate	Duration
Outside	15 lpm	5 minutes summer, all other times 10 minutes
Clean Room	15 lpm	10 minutes
Indoor – occupied	15 lpm	5 minutes
Basement or dusty room	15 lpm	3-5 minutes
Wall Cavity	15 lpm	Less than 1 minute

## Procedure

- Remove the seal from the bottom of the cassette and retain to reseal when sampling is complete.
- Attach either a ¼ inch or 3/8 in tubing to the bottom of the cassette, coming from a calibrated pump that has a rotometer adjusted to 15 L.
- Remove the seal from the top of the cassette and retain to reseal when sampling is complete.
- Turn on the pump and record the amount of time that air is drawn through the cassette. Turn pump off after the time has expired.
- Disconnect pump and reseal cassette.
- Mark cassette with appropriate sample information and record on the Chain of Custody.
- Store cassette in a dry area, away from the sun until delivered to the laboratory.



## Zefon Air-O-Cell™

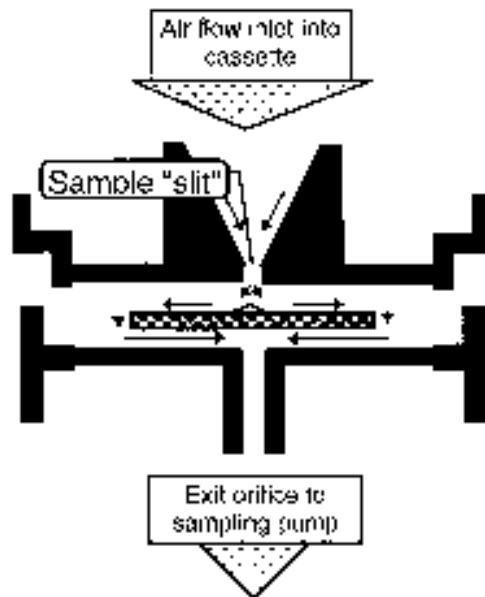


Zefon Air-O-Cell™ is a linear spore trap with an impaction trace similar to the Allergenco D™. Like other spore traps, it is used for the collection of airborne bio-aerosols including fungi, pollen, and particulates. Spore traps are appropriate for air sampling at the beginning of an investigation to set a baseline and as a final check for clearance sampling. They can also be used for monitoring during the remediation process. A suitable pump, capable of drawing 15 liters of air per minute, is attached to the cassette that contains a slide where the impaction trace is formed. The cassette is sent to the lab, where it is disassembled and the slide is stained and examined. Sampling times depend upon the environment being sampled. The table below has suggested times for various environmental conditions.

Suggested Sampling Times		
Environment	Flow Rate	Duration
Outside	15 lpm	5 minutes summer, all other times 10 minutes
Clean Room	15 lpm	10 minutes
Indoor – occupied	15 lpm	5 minutes
Basement or dusty room	15 lpm	3-5 minutes
Wall Cavity	15 lpm	Less than 1 minute

## Procedure

- Remove the seal from the bottom of the cassette and retain to reseal when sampling is complete.
- Attach either a ¼ inch or 3/8 in tubing to the bottom of the cassette, coming from a calibrated pump that has a rotometer adjusted to 15 L.
- Remove the seal from the top of the cassette and retain to reseal when sampling is complete.
- Turn on the pump and record the amount of time that air is drawn through the cassette. Turn pump off after the time has expired.
- Disconnect pump and reseal cassette.
- Mark cassette with appropriate sample information and record on the Chain of Custody.
- Store cassette in a dry area, away from the sun until delivered to the laboratory.



## Burkard™



Burkard™ is a linear spore trap machine that is used for the collection of airborne bio-aerosols including fungi, pollen, and particulates. It is different than most recently designed systems in that the slide is put directly into the pump rather than being imbedded in a cassette. The slide is first coated with Gelavitol or an equivalent material. After it is exposed to the sampled air, the slide requires careful handling while being transported to the lab.

Sampling times depend upon the environment being sampled. The table below has suggested times for various environmental conditions.

Suggested Sampling Times		
Environment	Flow Rate	Duration
Outside	15 lpm	5 minutes summer, all other times 10 minutes
Clean Room	15 lpm	10 minutes
Indoor – occupied	15 lpm	5 minutes
Basement or dusty room	15 lpm	3-5 minutes

## Procedure

- The slide will need to be greased with Gelvatol or an appropriate vacuum grease that will allow the laboratory stain to adhere to it. It may be possible to purchase pre-made slides.
- Be very careful not to touch any of the greased area of the slides.
- Feed the slide through the slit in the pump.
- Mark slide with appropriate sample information and record on the Chain of Custody.
- Place slide in slide case and do not allow slides to touch each other. Store slide in a slide case in a dry area, away from the sun until delivered to the laboratory.



Fungal spores under the microscope

## Micro 5™



Micro 5™ is a spore trap with a circular impaction trace of 4.4mm. It is used for the collection of airborne bio-aerosols including fungi, pollen, and particulates. Spore traps are appropriate for air sampling at the beginning of an investigation to set a baseline and as a final check for clearance sampling. They can also be used for monitoring during the remediation process. A suitable pump, capable of drawing 5 liters of air per minute, is attached to the cassette that contains a slide where the impaction trace is formed. The cassette is sent to the lab where it is disassembled and the slide is stained and examined.

Sampling time is 5 minutes for all environments.

## Procedure

- Remove pin in bottom of cassette and attach to air hose from the pump.
- Remove the cap from the top of the cassette.
- Turn on pump and allow air to flow in for 5 minutes at 5 L/minute.
- Turn off pump, mark cassette with appropriate sample information and record on the Chain of Custody.
- Replace the top on the cassette.
- Store slide in a dry area, away from the sun until delivered to the laboratory.

## Cyclex™



Cyclex™ is a spore trap with a circular impaction trace of 18.8mm<sup>2</sup>. It is used for the collection of airborne bio-aerosols including fungi, pollen, and particulates. Spore traps are appropriate for air sampling at the beginning of an investigation to set a baseline and as a final check for clearance sampling. They can also be used for monitoring during the remediation process. A suitable pump, capable of drawing 20 liters of air per minute, is attached to the cassette that contains a slide where the impaction trace is formed. The cassette is sent to the lab where it is disassembled and the slide is stained and examined.

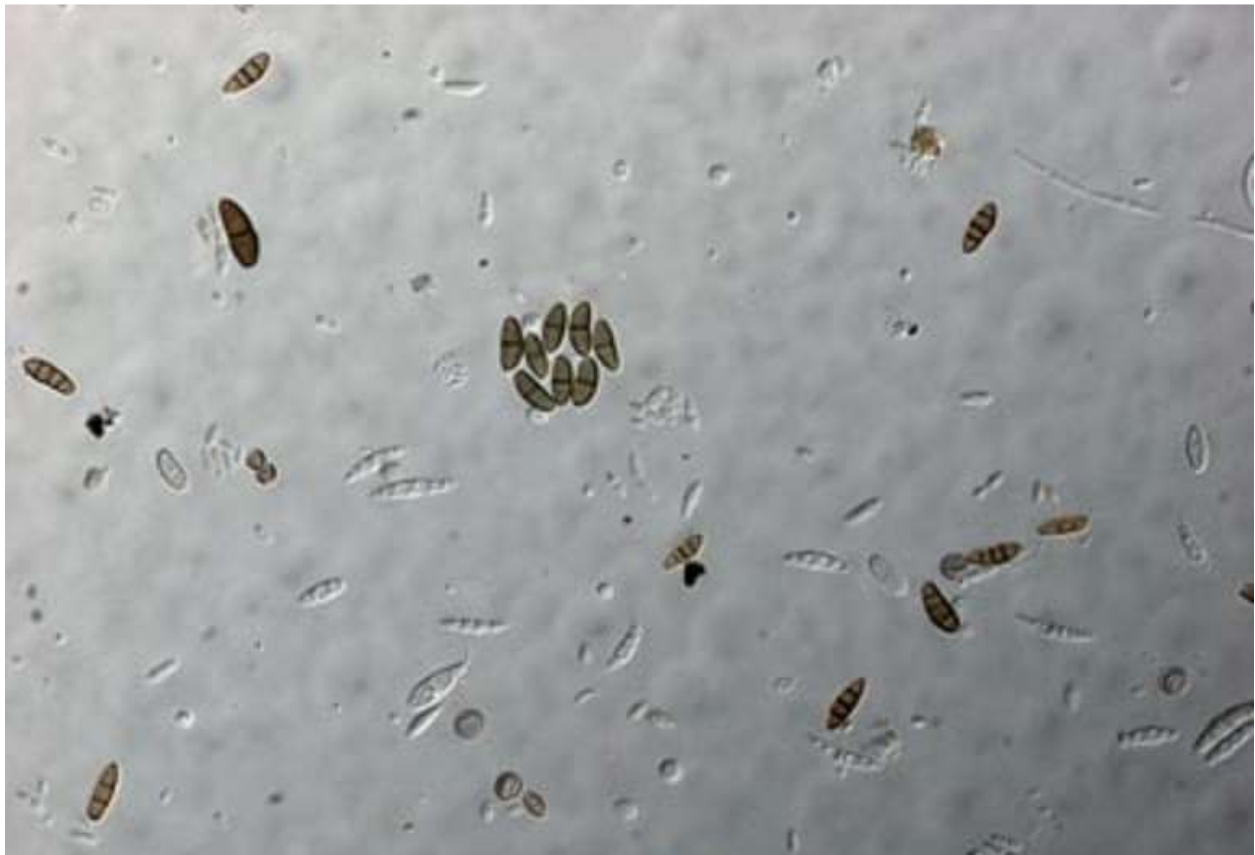
Sampling times depend upon the environment being sampled. The table below has suggested times for various environmental conditions.

Suggested Sampling Times		
Environment	Flow Rate	Duration
Outside	20 lpm	5 minutes summer, all other times 10 minutes
Clean Room	20 lpm	10 minutes
Indoor – occupied	20 lpm	5 minutes
Basement or dusty room	20 lpm	3-5 minutes



## Procedure

- Remove pin in bottom of cassette and attach to air hose from the pump.
- Remove the cap from the top of the cassette.
- Turn on pump and allow air to flow at 20 L/minute.
- Turn off pump, record time, mark cassette with appropriate sample information and record on the Chain of Custody.
- Replace the top on the cassette.
- Store cassette in a dry area, away from the sun until delivered to the laboratory.



Fungal spores under the microscope