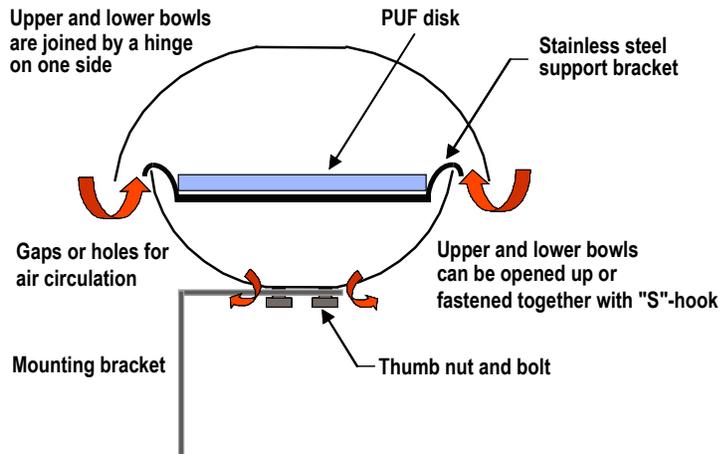
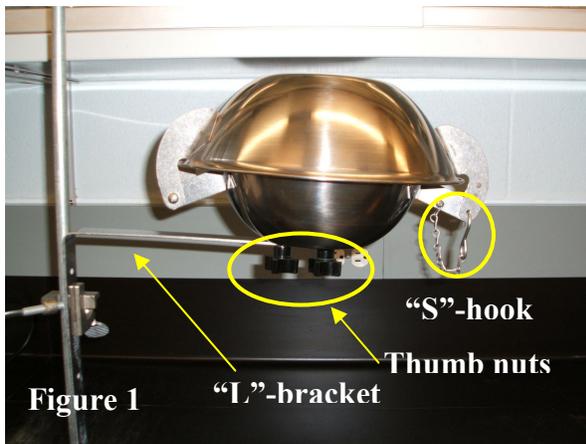


PUF Disk Sampler (TE-200 PAS) Standard Operating Procedure (SOP)



Equipment:

- Outdoor passive air sampler housing (Model TE-200-PAS, Tisch Environmental Inc.)
- "L"-bracket
- Cable ties of varying lengths
- PUF disk stored in 1-L glass jar
- Clean nitrile laboratory gloves
- Forceps (2 pairs)
- Teflon tape



Installation:

1. Securing the sampler housing to the structure support

- a) Attach the "L"-bracket to the passive air sampler housing using the two black thumb nuts and bolts that are fixed to the lower chamber as shown in Figure 1. The sampler housing should be placed at least 2 meters above the ground (higher is better) in an open area with unobstructed airflow. Suitable structure supports are fences or posts.

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- b) Secure the “L”-bracket to the structure support with the supplied cable ties or other appropriate fasteners so that the housing will not rattle or vibrate.
- 2. Installing the PUF disk in the sampler housing** (Gloves should be worn for this step.)
- a) Open up the housing by unfastening the “S”-hook between its upper and lower chambers. Inside the housing is a stainless steel support ring which is anchored securely within the lower chamber and is used to suspend the PUF disk within the housing (see Figure 2).
 - b) Remove the PUF disk from the 1-L jar using forceps. It is important that the PUF disk not be touched by bare hands.
 - c) Place the PUF disk under the rod of the support ring. [**Note:** The PUF disk may be curled when it comes out of the jar. Install it with the curled ends facing up since it will become flat with time.]
 - d) Close the sampler housing and reattach the S-hook between the upper and lower chambers. Write on the jar the start date and time of the sampling period and the sampling location (including details and observations about the site).
 - e) Deploy the PUF disk for a period of three months [**Note:** For a field blank, remove the PUF disk after one or two minutes of deployment and return it to the jar. Label it as a field blank. Store the jar with the field blank in a cool place until shipment. If storing the field blank or sample in a fridge, make sure that there are no chemical standards in the fridge.]
 - f) Store the jar in a safe, clean place until retrieval of the PUF disks. It will be used to ship the PUF disk sample to the laboratory for analysis.
- 3. Removing the PUF disk in the sampler housing**
- a) After three months of sampling, remove the PUF disk from the sampler housing using forceps, and transfer it to the appropriate jar.
 - b) Write on the jar the end date and time of the sampling period. Make sure that the lid is closed tightly. Use Teflon tape to ensure an airtight seal.
 - c) Store the jar with the sample in a cool, dark location until shipment.
 - d) When shipping the jars, make sure that they are well-padded and tightly packed to protect them from breakage. (Please avoid using foam packing material as this may contain chemicals that may contaminate the sample).
 - e) Ship the samples and field blanks to:
Dr. Tom Harner
Environment Canada
Science and Technology Branch
4905 Dufferin Street
Toronto, Ontario M3H 5T4 Canada

Questions or Concerns?

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