

Instructions

Zefon Disposable Inhalable Sampler (DIS)



The Zefon Disposable Inhalable Sampler (DIS) is a disposable variation of the original inhalable sampling head developed by the Institute of Occupational Medicine (IOM) in Scotland during the 1980's and currently marketed under license by SKC.

Applications Include:

- ACGIH definition of inhalable particulate matter
- NIOSH Method 5700 for particulate formaldehyde
- British Method MDHS 14/3 for inhalable dust in air
- British Method MDHS 14/4 for sampling and gravimetric analysis of respirable, thoracic and inhalable aerosols
- British Method MDHS 25/3 for organic isocyanates in air
- British Method MDHS 6/3 for lead in air
- Australian standard for inhalable particulate
- ISO/CEN for bioaerosols (health related fractions)

Product Specifications

Flow Rate:	2 L/min (personal sampling)
50% Cut Point:	100µm at 2L/min inhalable fraction
Construction:	Molded conductive plastic (sampler body)
Filters:	Filter Capsule constructed of PVC, Cellulose/MCE or Cellulose/PVC. (varies by Product No)
Weight w/ cassette:	0.5 oz (15.0 gm)
Size:	2.0 x 1.0 x 1.0 in (5.1 x 2.5 x 2.5 cm)

Accessories

PART#	DESCRIPTION
ZA0307	Calibration Adapter for Inhalable Sampler

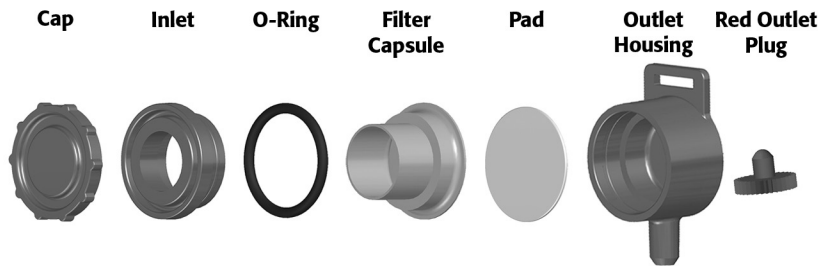


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LA03072 Rev 2

Parts of the Sampler

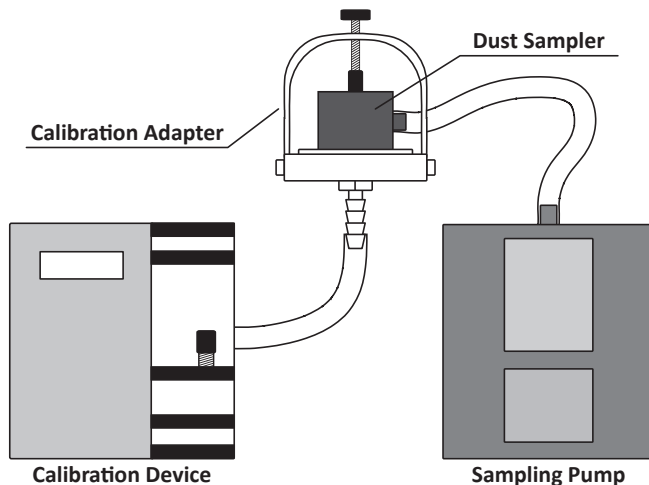


Calibration

Before sampling can take place, the sampling pump and DIS sampler need to be properly calibrated. This can be done easily by using the Zefon Inhalable Sampler Calibration Adapter (p/n ZA0307). Follow the steps below:

1. Insert the DIS sampler into calibration adapter. Tighten thumbscrew until snug.
2. Connect tubing from the DIS sampler Outlet port to the Inlet fitting on the pump.
3. Attach a section of tubing to the brass hose barb on the calibration adapter and the other end to the calibrator.
4. Start the pump and adjust flow rate until the calibrator indicates 2 L/min.

Note: Calibration Jars, such as Zefon P/N ZA0063 may alternatively be used for calibration.



Sampling

1. Ensure the pump has been calibrated to the method flow rate.
2. Clip the DIS sampler onto a worker's clothing near the breathing zone. This is commonly attached to the workers lapel.
3. Remove the red Outlet Plug. Save for later use.
4. Connect tubing from the Inlet of the worker's sampling pump to the Outlet of the DIS sampler.
5. Remove the Cap covering the sampler Inlet. (This may be stored during sampling by attaching it to the back of the sampler Outlet, see figure below.)
6. Sample for the duration specified by the chosen method.
7. After sampling, cover the sampler Inlet with the Cap and insert the red Outlet Plug into the Outlet.
8. Place the sampler into a bag, package appropriately for shipment and ship to a laboratory for analysis.

Note: If using NIOSH Method 5700 to determine exposure to formaldehyde on dust, ship a blank cassette along with the sampled cassette. Do not pull air through the blank.



Transport/Storage Configuration



Sampling Configuration

Inlet Cap attaches to the front for storage and the back during sampling.