



Using Assay Technology Diffusive Monitors (Badges)

A Quick How to Guide

Your badges arrive.



Open the box and find the Technical Insert on top.



TECHNICAL INSERT

Item No	571	ChemDisk™ Monitor for Aldehydes	Prepared by	VHL
Edition	06/20/2014		Approved by	CRM

The ChemDisk™ Personal Monitor is designed to measure exposure to chemicals in order to demonstrate workplace compliance with Permissible Exposure Limits (PELs) and Short Term Exposure Limits (STELs) defined by the Occupational Safety and Health Act of 1970 and Title 29 Code of Federal Regulations.

This **Technical Insert** contains product specific information on use and storage.

9159-571 06/2014

Sampling Medium:	Fiberglass coated with 2,4-dinitrophenylhydrazine (DNPH)
Analytes Sampled:	Formaldehyde, Glutaraldehyde, and o-Phthalaldehyde; See <i>AT Labs IH Sampling Guide</i> for other aldehydes
Analytical Method:	Modified OSHA 1007; Modified OSHA 64; Modified EPA TO-11: Desorption in acetonitrile; analysis of the DNPH derivative by high performance liquid chromatography (HPLC) with UV/VIS detector
Recommended Sampling Time:	Formaldehyde: PEL = 8 hrs or full shift; STEL = 15 min Glutaraldehyde: Ceiling = 15 min; IAQ = 24-72 hrs o-Phthalaldehyde: STEL = 15 min Functional range: 15 minutes - 72 hours
Recommended Holding Time:	Monitors must be received by Lab within four (4) weeks after sampling.
Sample Capacity:	Formaldehyde: 12.5 ppm for 8 hour sample (100 ppm-hrs)
Reporting Limit (RL):	Formaldehyde: 0.33 ppm for 15 min, 0.010 ppm for 8 hrs (0.080 ppm-hrs); Glutaraldehyde: 0.020 ppm for 15 min (0.0050 ppm-hrs); o-Phthalaldehyde: 0.020 ppm for 15 min (0.0050 ppm-hrs)
Sampling Rate (SR):	Formaldehyde: 16.2 mL/min; Glutaraldehyde: 7.24 mL/min; o-Phthalaldehyde: 6.18 mL/min
Interfering Substance(s):	Other aldehydes and ketones do not interfere if HPLC resolution is adequate.
Effect of Temperature:	Effect on result ≤ 5% within 0 - 50°C (32 - 122°F).
Effect of Humidity:	Functions as claimed within 20 - 80% RH.
Accuracy (MTE):	Meets or exceeds OSHA requirements for accuracy: Maximum Total Error (MTE) ≤ 25% at PEL; ≤ 25% at STEL and action level.
Storage Conditions:	Store under refrigerated conditions for maximum shelf life. Do Not Use after Expiration Date printed on pouch.
IMPORTANT:	Warranty valid only if Instructions for Use have been followed.
WARNING:	Wash affected area thoroughly if Sampling Medium is contacted.

For detailed directions, see **Instructions for Use** included in each package of Monitors.

For information about each analyte which can be sampled, refer to *AT Labs IH Sampling Guide* at www.assaytech.com or

call **TOLL FREE NUMBER 1-800-833-1258**

What's in the box?



- ▶ A. Inside the box will be ziplocs that contain...
- ▶ B. A sealed pouch containing a scavenger pack and badge. Don't open the pouch until you are ready to start.
- ▶ C. Scavenger pack can be thrown away or put in the return pouch for the trip back to the lab.
- ▶ D. The badge will have a serial number on the back. In this case MF0973. The QR codes are used by customers who are already using Assay's SmartBadge App.



Wearing a Badge. What could be easier?



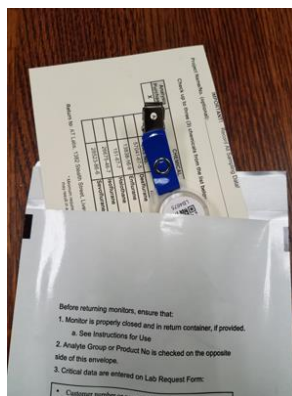
1. Put on the Clip.
2. Note the Serial number.
3. Open the Badge.
4. Clip it to your Collar.



Monitoring Do's and Don'ts

Do's

- Remove the badge from its pouch when you are ready to begin monitoring. (Not well before.)
- For Personal Monitoring, Clip on your collar.
- For area monitoring: Run a small fan in areas that have stagnant air.
- Put the badge in the return envelope right after monitoring.



Don'ts

- Don't Wear under clothing, like under a sweater or in a pocket.
- Don't Splash the badge.
- Don't Touch the badge with a glove that is wet with the chemical being monitored.

Completing the Lab Request Form

Monitor Serial No. *		LAB REQUEST FORM		Assay Tech Customer No.	
PLEASE Print Clearly & Complete all boxes					
Report To:					
Name/Title/Email Stop*					
Company/Organization*				E-Mail	
Address*				TEL*	
City/State/Zip*				FAX	
Sampling Data:					
Client Sample ID (Name/Location)					
Start Time*		AM PM	Stop Time*		AM PM
			OR		Time Sampled (min)*
Date(s) Sampled*		Sampled & Relinquished By			



Carefully consider who should get the report.

Enter the start and stop time OR Time Sampled. Entering both leads to confusion.

The Monitor ID/Serial number is Letter, Letter, 4 numbers (ABI234)

Lab Request Form Continued..

If a badge can be used for multiple chemicals, check the chemicals you need tested.

If you have prepaid for analysis, you can request more chemicals, but understand there will be a charge.

IMPORTANT! Record All Sampling Data


Project Name/No. (optional): _____

Check up to three (3) chemicals from the list below. 9146-574 7/17

Analysis Purchased	CHEMICAL ANALYTE			Monitor Number
X	Anesthetic Gases (check up to 3, below)			574
	Check	Analyte CAS No.	Analyte Name	
		57041-67-5	Desflurane	
		13838-16-9	Enflurane	
		151-67-7	Halothane	
		26675-46-7	Isoflurane	
		28523-86-6	Sevoflurane	

Return to: AT Labs, 1382 Stealth Street, Livermore, CA 94551

* Minimum required fields. Failure to complete these fields may result in a delay of your samples being processed.



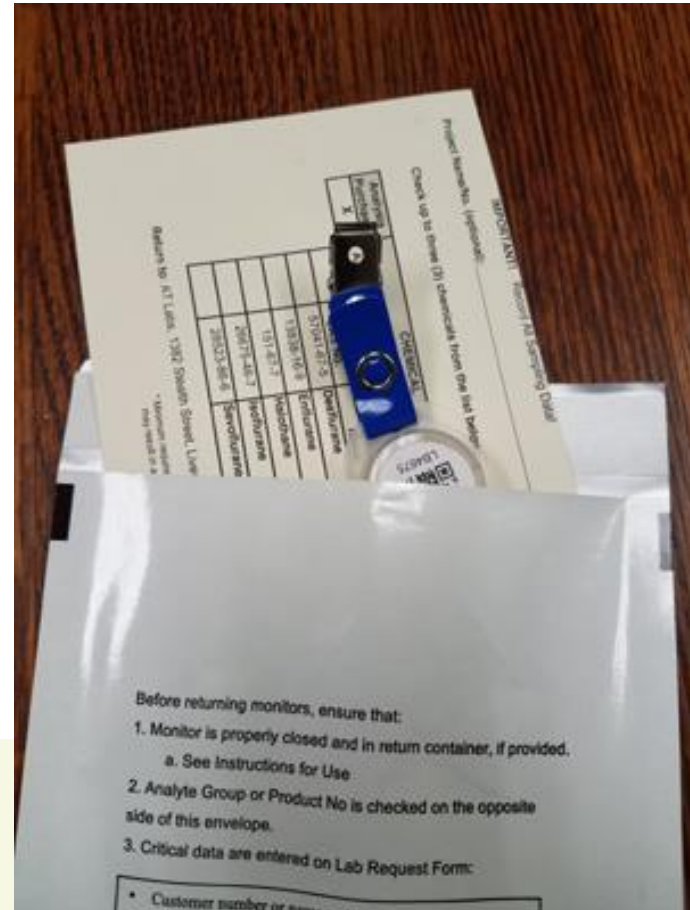
Returning Badges back to the lab.

Only one badge per return envelop or risk cross contamination.

Ship back via a traceable method (not 1st class mail.)

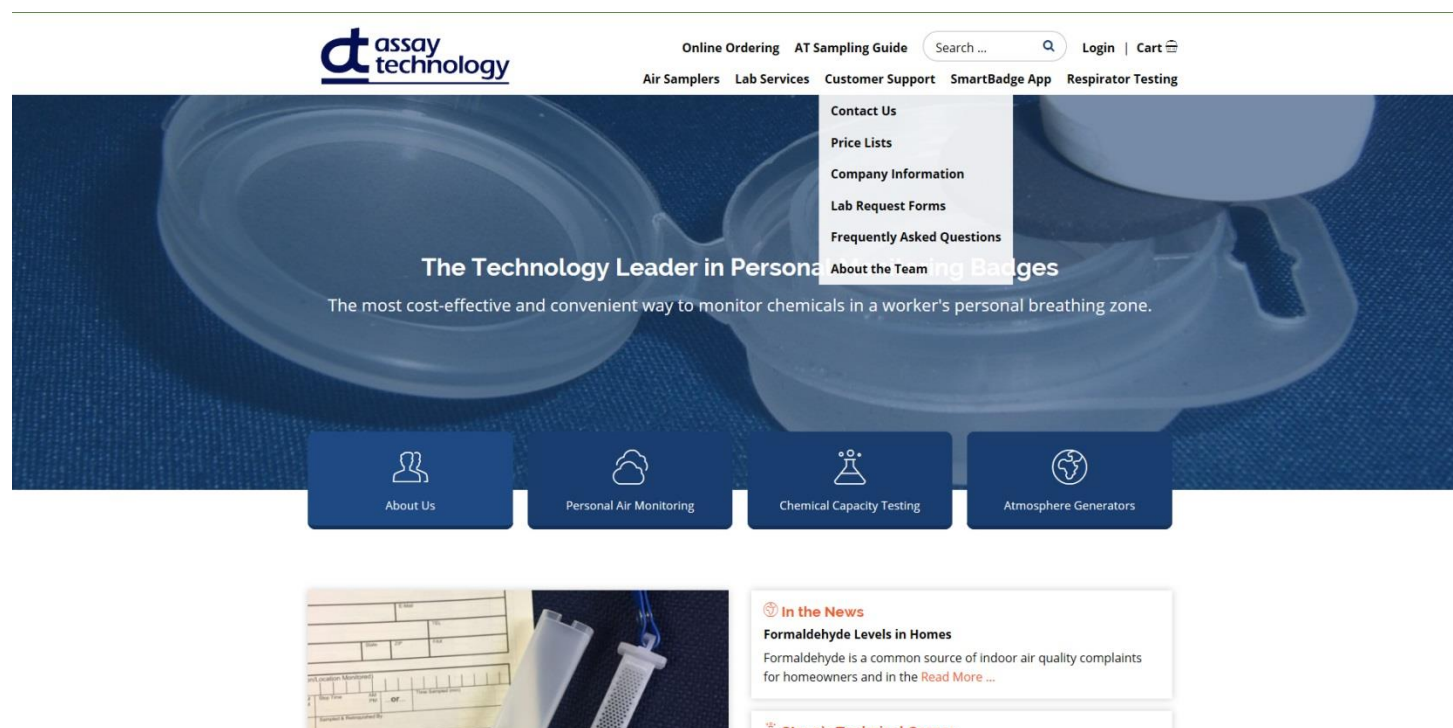
Only the 595 badge requires refrigeration after sampling.

The instructions state which lab each badge should be sent too. If you send a badge to the wrong lab, we will ship it overnight to the correct lab without an extension of the due date. If you have badges that go to each lab, pick one and well will handle it.



Need help Reading the Report?

Go online and read our report FAQs. It has answer to most every question customers ask.



Assaytech.com or call us at 800-833-1258

FAQs — All available on the website: assaytech.com

Sampling Guide FAQs

What's new about the Sampling Guide?



Why can't some chemicals be analyzed together even though they can be collected on the same badge?



Lab Report FAQs

How do I read my lab report (Short video answer)



How do I read my lab report? (Detailed version)



Why doesn't my report tell me if I passed or failed?



What do all the columns on my report mean?



What equations are used to determine the exposure?



Which column has the data that I am looking for?



Is the exposure a "TWA?"



The exposure on our report is the analyte's average concentration in the air for the period of time that was monitored. It is NOT necessarily an 8 hour time-weighted average (TWA). It is an 8 hour TWA only if you monitored for 8 hours. If you want to convert the exposure to an 8 hour TWA and do not know how, please call for technical support at 800-833-1258. Based on what you know about the environment that was sampled, you will need to decide what happened while you were *not* monitoring. For example, if you monitored for 5 hours, then what happened during the other three hours? Did you expect the exposure rate would not change or did any possible exposure end?

Is the Concentration Reporting Limit the regulatory limit?



Why do the Concentration Reporting Limits vary on my samples even though I am testing for the same chemical?



What is Total Quantity Found (ug)?



What does "ND" mean?



END...

