BEACON ENVIRONMENTAL

Global Leader in Soil Gas and Air Analyses

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# AIR MONITORING WITH THE BEACON AIR SAMPLER

**EASY-TO-USE PASSIVE SORBENT SAMPLERS TO TARGET A BROAD RANGE OF COMPOUNDS**




## BENEFITS

- Time-weighted average concentrations
- Sample for hours, days, or weeks
- Target petroleum and chlorinated compounds, including Vinyl Chloride
- Air quality monitoring during remediation
- More accurate than other passive methods
- Sensitive – Detection limits in the ppt range
- Easy-to-use BeSure Sample Collection Kit™

## APPLICATIONS



Vapor Intrusion Monitoring




Sewer Gas Sampling

## Accurate and Easy-to-Use

Beacon can target a broad range of compounds using sorbent samplers to passively collect VOCs and SVOCs in indoor and ambient air following established U.S. EPA, ASTM and ISO methods, as well as other international protocols. Beacon has analyzed samples from every state and more than 45 countries from across all seven continents.

Beacon’s quantitative sorbent samplers are inexpensive to ship and are also provided at an overall lower price compared to canister samples. Their ease of transport, simple sample collection procedures, and ability to report time-weighted average concentration data (ug/$m^3$) with third-party validated uptake rates make them the preferred sampling method.

Beacon Samplers have a 30-day hold time and are analyzed at Beacon’s accredited laboratory.

Beacon Environmental is ISO/IEC 17025:2017, DoD ELAP QSM 6.0 and NELAP accredited for the analysis of sorbent samples following US EPA Methods TO-17, TO-15, 8260D and 325B.



# BEACON PASSIVE AIR SAMPLER REPORTING LIMITS

Limits of Detection (LODs) based on Exposure Periods and Third-Party Validated Uptake Rates. When required, lower detection limits can be reported.

| COMPOUND | CAS | Uptake Rate (ml/min) | 1 Day LOD (ug/m³) | 3 Days LOD (ug/m³) | 7 Days LOD (ug/m³) | 14 Days LOD (ug/m³) |
|---|---|---|---|---|---|---|
| Vinyl Chloride | 75-01-4 | 0.81 | 4.29 | 1.43 | 0.61 | 0.31 |
| 1,1-Dichloroethene | 75-35-4 | 0.33 | 10.52 | 3.51 | 1.50 | 0.75 |
| Methylene Chloride | 75-09-2 | 0.35 | 9.92 | 3.31 | 1.42 | 0.71 |
| 1,1,2-Trichlorotrifluoroethane (Fr.113) | 76-13-1 | 0.89 | 3.90 | 1.30 | 0.56 | 0.28 |
| trans-1,2-Dichloroethene | 156-60-5 | 0.44 | 7.89 | 2.63 | 1.13 | 0.56 |
| Methyl-t-butyl ether | 1634-04-4 | 0.50 | 13.89 | 4.63 | 1.98 | 0.99 |
| 1,1-Dichloroethane | 75-34-3 | 0.85 | 4.08 | 1.36 | 0.58 | 0.29 |
| cis-1,2-Dichloroethene | 156-59-2 | 0.53 | 6.55 | 2.18 | 0.94 | 0.47 |
| Chloroform | 67-66-3 | 0.35 | 9.92 | 3.31 | 1.42 | 0.71 |
| 1,2-Dichloroethane | 107-06-2 | 0.56 | 6.20 | 2.07 | 0.89 | 0.44 |
| 1,1,1-Trichloroethane | 71-55-6 | 1.05 | 3.31 | 1.10 | 0.47 | 0.24 |
| Cyclohexane | 110-82-7 | 0.51 | 13.62 | 4.54 | 1.95 | 0.97 |
| Carbon Tetrachloride | 56-23-5 | 0.43 | 8.16 | 2.72 | 1.17 | 0.58 |
| Benzene | 71-43-2 | 0.53 | 13.10 | 4.37 | 1.87 | 0.94 |
| Trichloroethene | 79-01-6 | 0.33 | 10.52 | 3.51 | 1.50 | 0.75 |
| 1,4-Dioxane | 123-91-1 | 0.41 | 8.47 | 2.82 | 1.21 | 0.60 |
| 1,1,2-Trichloroethane | 79-00-5 | 0.33 | 10.52 | 3.51 | 1.50 | 0.75 |
| Toluene | 108-88-3 | 0.40 | 17.36 | 5.79 | 2.48 | 1.24 |
| 1,2-Dibromoethane (EDB) | 106-93-4 | 0.39 | 9.02 | 3.01 | 1.29 | 0.64 |
| Tetrachloroethene | 127-18-4 | 0.41 | 8.47 | 2.82 | 1.21 | 0.60 |
| 1,1,1,2-Tetrachloroethane | 630-20-6 | 0.41 | 8.52 | 2.84 | 1.22 | 0.61 |
| Chlorobenzene | 108-90-7 | 0.85 | 4.08 | 1.36 | 0.58 | 0.29 |
| Ethylbenzene | 100-41-4 | 0.85 | 8.17 | 2.72 | 1.17 | 0.58 |
| p & m-Xylene | 108-38-3 | 0.88 | 7.89 | 2.63 | 1.13 | 0.56 |
| o-Xylene | 95-47-6 | 0.88 | 7.89 | 2.63 | 1.13 | 0.56 |
| 1,2,3-Trichloropropane | 96-18-4 | 0.75 | 4.63 | 1.54 | 0.66 | 0.33 |
| Isopropylbenzene | 98-82-8 | 0.83 | 8.37 | 2.79 | 1.20 | 0.60 |
| 1,3,5-Trimethylbenzene | 108-67-8 | 0.83 | 8.37 | 2.79 | 1.20 | 0.60 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 0.83 | 8.37 | 2.79 | 1.20 | 0.60 |
| 1,3-Dichlorobenzene | 541-73-1 | 0.75 | 4.63 | 1.54 | 0.66 | 0.33 |
| 1,4-Dichlorobenzene | 106-46-7 | 0.75 | 4.63 | 1.54 | 0.66 | 0.33 |
| 1,2-Dichlorobenzene | 95-50-1 | 0.75 | 4.63 | 1.54 | 0.66 | 0.33 |
| 1,2,4-Trichlorobenzene | 120-82-1 | 0.39 | 8.86 | 2.95 | 1.27 | 0.63 |
| Naphthalene | 91-20-3 | 0.80 | 4.34 | 1.45 | 0.62 | 0.31 |
| 1,2,3-Trichlorobenzene | 87-61-6 | 0.39 | 8.86 | 2.95 | 1.27 | 0.63 |
| 1-Methylnaphthalene | 90-12-0 | 0.76 | 4.57 | 1.52 | 0.65 | 0.33 |
| 2-Methylnaphthalene | 91-57-6 | 0.76 | 4.57 | 1.52 | 0.65 | 0.33 |
| TPH C5-C8 | | 0.52 | 3,339 | 1,113 | 477 | 238 |
| TPH C9-C15 | | 0.71 | 2,103 | 701 | 300 | 150 |