Below is a list of some of the volatile organic compounds (VOCs or VOs) that are frequently sampled with EON's polyethylene passive diffusion bags (PDBs)—Chlorinated Solvents and BTEX. This is not an all-inclusive list—PDBs can be used to sample nearly any nonpolar VOC in aqueous media. If you are curious about a specific compound, please reach out to our technical team!

### **Chlorinated Solvents - Methanes**

Abbrev.	Name	Common Name
CM	Chloromethane	Methyl Chloride
DCM	Dichloromethane	Methylene Chloride
CF	Trichloromethane	Chloroform
CT	tetrachloromethane	Carbon Tetrachloride

## **Chlorinated Solvents - Ethanes**

Abbrev.	Name	Common Name
1,2 DCA	1,2-Dichloroethane	
CA	Chloroethane	
1,1,2,2-TeCA	1,1,2,2-Tetrachloroethane	
1,1-DCA	1,1,-Dichloroethane	1,1-DCA
1,1,1-TCA	1,1,1-Trichloroethane	Methyl chloroform
1,1,2-TCA	1,1,2-Trichlroethane	

# **Chlorinated Solvents - Ethenes (Ethylenes)**

Abbrev.	Name	Common Name
PCE	tetrachloroethene	Perchloroethylene
VC	chloroethene	Vinyl Chloride
trans-DCE	trans-1,2-Dichloroethene	1,2-dichloroethylene
cis-DCE	cis-1,2-Dichloroethene	cis-dichloroethane
TCE	Trichloroethene	Trichloroethylene

#### **BTEX -Aromatic Petroleum Hydrocarbons (PCHs)**

Abbrev.	Name	Common/other Name
PhH	Benzene	
PhMe; Tol	Toluene	methylbenzene
EB	Ehtylbenzene	Ethylbenzol
	Xylenes (total)	Dimethylbenzenes

### Additional Common VOCs Sampled with PDBs\*

Category	Examples	
Hexanes	Ex: Methylcyclohexane; cyclohexane; n-Hexane	
Other Hydrocarbons	methane; ethane; ethene (ethylene); Naphthalene	
Compound	Abbreviation and/or Common Names	
Ethylene Dibromide	(EDB)	
Ethyl Acetate	(EtOAc or ETAC or EA); AKA: acetate ester or ethyl ester	

<sup>\*</sup>Many additional non-polar VOCs can be sampled with the PDB. This is a list of some of the CoCs we are most commonly asked about.

### When to Ask EON about Other Passive Samplers:

Single-membrane PDBs should never be used for physical parameters or for compounds other than VOCs. They are not appropriate for SVOCs, inorganics, PFAS, etc. The following volatiles or categories of volatiles may not be compatible with standard PDB sampling and/or may have mixed results in existing data:

- Acetone and other Ketones (ex: 2-Hexanone, MIBK)
- Butanones (ex., 2-Butanone/MEK)
- Methyl tert-Butyl Ether (MTBE)
- Styrene
- 1,4-dioxane
- N-Propylbenzene
- 1,24- & 1,3,5-Trimethylbenzene

## **What Other Passive Samplers does EON Carry?**

Either of the following no-purge, passive sampling options can be used to sample virtually all constituents that are present in the natural groundwater flow in the sample interval of the well screen, including those listed above:

- Dual Membrane Passive Diffusion Bag (DMPDB) another equilibrium-based diffusion sampler that has a second, more porous membrane in series with the polyethylene membrane. Field-filled with DI water and deployed & retrieved in the same way as the PDB.
- HydraSleeve a passive grab sampler that is deployed empty and grabs and seals a
  core of the water directly in the screen interval of choice, bypassing the stagnant or
  aerated water in the casing.

