


POM PASSIVE SAMPLER MONITORING ORGANIC CONTAMINANTS

 eurofins

Environment

MONITORING OF ORGANIC CONTAMINANTS

• ADVANTAGES

- Easy handling
- No risk of contamination
- Low sampler cost
- No need of special deployment field cage
- Low LOQ of freely dissolved analytes
- No saturation risk
- No need for information of salinity, temperature, water velocity, viscosity or time

• TECHNOLOGY

The polyoxymethylene, POM, passive sampling technology offered by Eurofins is a technology transfer from NGI (the Norwegian Geotechnical Institute) to Eurofins. The POM sampler is made of thin (55µm) strips of polyoxymethylene.

It is an equilibrium passive sampler that will monitor the last 4 weeks. POM is suitable for fresh water, sea water, leachate, wastewater, groundwater and pore water; and it can be used for various applications.

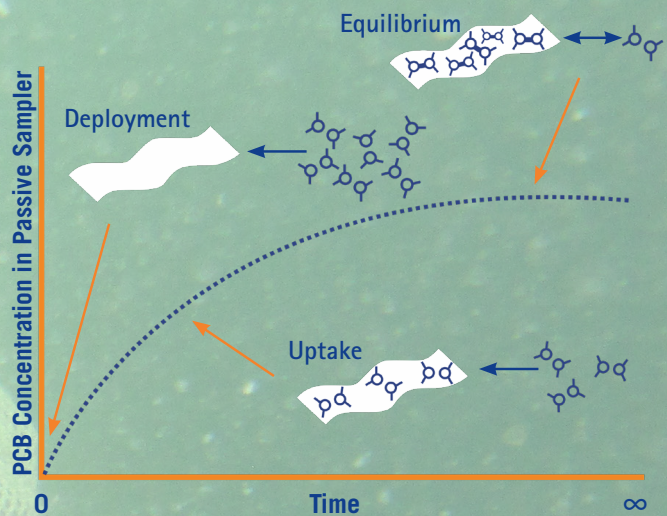


SEAWATER | FRESHWATER | WASTEWATER | POREWATER

• PARAMETERS

It is possible to quantify very low concentrations of PAHs and PCBs, with lower detection limit down to 1 pg/l for PCB and 1 ng/l for PAH. This has been documented with extensive testing in the laboratory and a number of field trials.

The laboratory in Bergen, Norway can analyze PCB and PAH of the POM material and by K_d (equilibrium constants) the dissolved concentration of PAH and PCB in the water is calculated.



• INSTRUCTIONS

ORDER CODES:

MX522 (PCB)

MX524 (PAH)

PMX60 (PAH & PCB)



Order POM from Eurofins



Attach to rope/device for submerge in water

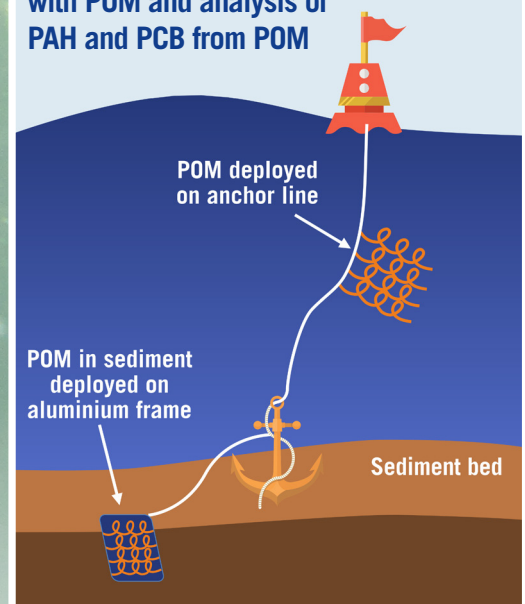


Sample in minimum 4 weeks (no max limit)



Put it in original glass container. Ship to Eurofins lab. POM can be frozen for storage

Eurofins supports you with POM and analysis of PAH and PCB from POM



Reference list

Field testing of equilibrium passive samplers to determine freely dissolved native polycyclic aromatic hydrocarbon concentrations

Cornelissen Et al.

Environmental Toxicology and Chemistry, Vol. 27, No. 3, pp. 499–508, 2008

Advancing the Use of Passive Sampling in Risk Assessment and Management of Sediments Contaminated with Hydrophobic Organic Chemicals: Results of an International Ex Situ Passive Sampling Interlaboratory Comparison

Jonker Et al.

Environ. Sci. Technol. 52, 6, 3574–3582

Assessing PAH and PCB emissions from the relocation of harbour sediments using equilibrium passive samplers

Cornelissen Et al.

Chemosphere 72 (2008) 1581–1587

Influence of historical industrial epochs on the pore water and partitioning profiles of polycyclic aromatic hydrocarbons and polychlorinated biphenyls in Oslo harbor, Norway, sediment cores

Arp Et al.

Environmental Toxicology and Chemistry, Vol. 30, No. 4, pp. 843–851, 2011

Review of polyoxymethylene passive sampling methods for quantifying freely dissolved porewater concentrations of hydrophobic organic contaminants

Arp Et al.

Environmental Toxicology and Chemistry, Vol. 34, No. 4, pp. 710–720, 2015

Equilibrium Partition Coefficients of Diverse Polar and Nonpolar Organic Compounds to Polyoxymethylene (POM) Passive Sampling Devices

Endo Et al.

Environ. Sci. Technol. 45, 23, 10124–10132

Combining Leaching and Passive Sampling To Measure the Mobility and Distribution between Porewater, DOC, and Colloids of Native Oxy-PAHs, N PACs, and PAHs in Historically Contaminated Soil

Enell Et al.

Environ. Sci. Technol. 2016, 50, 11797–11805

Determination of polyoxymethylene (POM) – water partition coefficients for oxy-PAHs and PAHs

Josefsson Et al.

Chemosphere 119 (2015) 1268–1274

Ionic Liquid Assisted Dissolution of Dissolved Organic Matter and PAHs from Soil Below the Critical Micelle Concentration

Markiewicz Et Al.

Environ. Sci. Technol. 2013, 47, 6951–6958

In Situ Measurement of PCB Pore Water Concentration Profiles in Activated Carbon-Amended Sediment Using Passive Samplers

Oen Et Al.

Environ. Sci. Technol. 2011, 45, 4053–4059

Performance of Passive Samplers for Monitoring Estuarine Water Column Concentrations: 2. Emerging Contaminants

Burgess Et al.

Society of Environmental Toxicology and Chemistry, Pensacola, FL, 32(10):2190–2196, (2013).

Integrating Passive Sampling Methods into Management of Contaminated Sediment Sites: A Guide for Department of Defense Remedial Project Managers

ESTCP Project ER-201216

Menzie, Driscoll, Thompson

Guidelines for Using Passive Samplers to Monitor Organic Contaminants at Superfund Sediment Sites

OSWER Directive 9200.1-110 FS, Des 2012

QUESTIONS AND SHIPMENT

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