MODERNWATER | RaPID Assay®

Rapid Environmental Contaminant Detection

RaPID Assay® is a rapid field or laboratory enzyme immunoassay method for the analysis of soil and water for remediation, assessment, and industrial testing. It uses an antibody coated magnetic particle technology to detect the analyte of concern. The method can be used to test for analytes such as pesticides, petroleums, PCB's, and PCP.

RaPID Assay® allows for quick turnaround time on results while also offering highly accurate data for remedial investigation, groundwater monitoring, and pesticide and herbicide detection. RaPID Assay® is not only a time efficient process, but is also cost efficient.

In addition to soil and water testing, there are many applications available for testing additional matrices, including but not limited to, PCB in concrete and other building materials, PCB wipe sampling, PCB in fish tissue, and contaminants in foods such as raw milk and juice.

- Quantitative or semi-quantitative results
- High throughput - test up to 50 samples at once
- Results available in approximately 60 minutes
- Many methods associated with an SW-846 method
- Application notes for uncommon matrices

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SPECIFICATIONS	
Dimensions	Height 254mm x width 146mm x depth 89mm (10" x 5.75" x 3.5")
Weight	0.8kg (1.85lbs)
Storage Temperature	2°C to 8°C
Room Temperature Requirement	18°C to 27°C

Analytes

PCB

PCP

PAH

Carcinogenic PAH

Total BTEX/TPH

2,4-D

Atrazine and Atrazine High Sensitivity

Spinosad

Triclopyr

Process explained

The RaPID Assay® kits apply the principles of enzyme linked immunosorbent assay (ELISA) to the determination of the target analyte and related compounds.

The sample and an enzyme conjugate are added to a test tube, followed by paramagnetic particles with antibodies, specific to the target analyte, bound to them. Both the target analyte and the enzyme labelled analyte compete for antibody binding sites on the magnetic particles.

A magnetic field is then applied to hold the paramagnetic particles, with analyte and labelled analyte analog bound to the antibodies on the particles, in proportion to their original concentration, in the tube. After decanting and washing unbound reagents from the tube, an enzyme substrate and chromogen mixture are added to the tube.

The enzyme labelled analyte analog bound to the antibody catalyzes the conversion of the substrate/chromogen mixture to a colored product and after an incubation period, is stopped and stabilised using an acid.

Because the labelled analyte (conjugate) was in competition with the unlabelled analyte (sample) for the antibody sites, the colour that develops is inversely proportional to the concentration of analyte in the sample. In other words, the darker the colour, the lower the concentration in your sample.

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