

ENVIROLOGIX Inc. - Environmental & Food Monitoring Kits: Pesticides

CHLORPYRIFOS (ELISA Kit)

● Intended use

The Envirologix Chlorpyrifos Plate Kit Is Designed For The Quantitative Laboratory Detection Of Chlorpyrifos Pesticide Residues In Ground And Surface Water Samples, With An Assay Range From 0.3 To 6 Parts Per Billion (Ppb).

● General

The EnviroLogix Chlorpyrifos Plate Kit is a competitive Enzyme-Linked ImmunoSorbent Assay (ELISA). In the test, Chlorpyrifos pesticide residues in the sample compete with enzyme (horseradish peroxidase) labeled Chlorpyrifos for a limited number of antibody binding sites on the inside surface of the test wells. After a simple wash step, the outcome of the competition is visualized with a colour development step. As with all competitive immunoassays, sample concentration is inversely proportional to color development.

Darker color = Lower concentration

Lighter color = Higher concentration

The EnviroLogix Chlorpyrifos Plate Kit can be used in the following applications:

- Source Water Protection.
- Treated Effluent Monitoring.
- Drinking Water Monitoring.
- Run-Off Assessment & Monitoring.
- Point Source Testing.

Materials Provided:	Materials Required But Not Provided:
<ul style="list-style-type: none">- 8 x Strips of 12 Antibody-Coated Wells each, in plate frame.- 1 x Vial of 1 microgram (μg) per milliliter (mL) Chlorpyrifos Calibrator Stock Solution (in methanol).- 1 x Bottle of Chlorpyrifos-Enzyme Conjugate.- 1 x Bottle of Substrate.- 1 x Bottle of Stop Solution.	<ul style="list-style-type: none">- Distilled Water (or equivalent).- Glass Vials or tubes.- Positive-Displacement Pipetter with disposable tips and plungers (capable of delivering 60 microliters (μL)).- Pipette(s) capable of delivering 10, 9.5, 7.5, 2.5 and 0.5 mL.- Disposable Tip, Adjustable Air Displacement pipette which will measure 50 μL, 100 μL and 150 μL.- Marking Pen (indelible).- Tape or Parafilm.- Timer (1 hour and 30 minutes).- Cool Tap or Distilled Water.- Microtiter Plate Reader or strip reader.- Microtiter Plate Washer (optional).- Twelve-Channel Pipette that will measure 50 μL, 100 μL and 150 μL (optional).- Racked Glass Dilution Tubes (optional).- Orbital Plate Shaker (optional).

Kit Specifications:

Plate Format:	- 96 Well.
Time Requirement:	- 2 h 15 min.
Limit of Detection:	- 0.3 ppb.
Limit of Quantification:	- 0.4 ppb.
Cross Reaction:	- Chlorpyrifos (0.3 ppb). - Chlorpyrifos-Methyl (4.1 ppb). - Diazinon (6.5 ppb). - Quinalphos (17 ppb).

Measurement:
Product ID #:

- Azinphos-Ethyl (21 ppb).
- Azinphos-Methyl (43 ppb).
- Pirimiphos-Ethyl (33 ppb).
- Pirimiphos-Methyl (87 ppb).
- Parathion (32 ppb).
- Parathion-Methyl (165 ppb).
- Fenitrothion (95 ppb).
- Malathion (233 ppb).
- Microtiter Plate Reader or strip reader.
- EP004.