

# ENVIROLOGIX Inc. - Human Exposure Monitoring Kits

## ALACHLOR MERCAPTURATE (ELISA Kit)

### ● Intended use

The Envirologix Alachlor Mercapturate In Urine Plate Kit Is Designed For The Quantitative Laboratory Detection Of Alachlor Mercapturate Residues In Human Urine Samples, With A Quantitative Assay Range From 20 To 650 Parts Per Billion (Ppb).

### ● General

The EnviroLogix Alachlor Mercapturate in Urine Plate Kit is a competitive Enzyme-Linked ImmunoSorbent Assay (ELISA). In the test, Alachlor Mercapturate residues in the sample compete with enzyme (horseradish peroxidase)-labeled Alachlor 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 color 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 Alachlor Mercapturate in Urine Plate Kit can be used in the following testing applications:

- Human Exposure Monitoring
- Public Health Screening Programs
- Health Risk Assessment

Materials Provided:	Materials Required But Not Provided:
<ul style="list-style-type: none"><li>- 8 x Strips of 12 Antibody-Coated Wells each, in plate frame.</li><li>- 1 x Vial of Negative Control.</li><li>- 1 x Vial of 20 ppb Alachlor Mercapturate Calibrator (Actual Concentration = 0.4 ppb*).</li><li>- 1 x Vial of 125 ppb Alachlor Mercapturate Calibrator (Actual Concentration = 2.5 ppb*).</li><li>- 1 x Vial of 650 ppb Alachlor Mercapturate Calibrator (Actual Concentration = 13 ppb*).</li><li>- 1 x Bottle of Alachlor-Enzyme Conjugate.</li><li>- 1 x Bottle of 10X Sample Diluent.</li><li>- 1 x Bottle of Substrate.</li><li>- 1 x Bottle of Stop Solution.</li></ul> <p>* The difference between the stated and actual concentration is to correct for the 1:50 dilution required for sample preparation.</p>	<ul style="list-style-type: none"><li>- Disposable Tip, Adjustable Air Displacement Pipette, which will measure 980 microliters (<math>\mu\text{L}</math>), 150 <math>\mu\text{L}</math>, 100 <math>\mu\text{L}</math>, 50 <math>\mu\text{L}</math> and 20 <math>\mu\text{L}</math>.</li><li>- Glass Test Tubes.</li><li>- Marking Pen (indelible).</li><li>- Tape or Parafilm.</li><li>- Timer (1 hour and 30 minutes).</li><li>- Distilled Water.</li><li>- Cool Tap Or Distilled Water for rinsing wells.</li><li>- Microtiter Plate Reader or strip reader.</li><li>- Microtiter Plate Washer (optional).</li><li>- Twelve-Channel Pipette that will measure 50 <math>\mu\text{L}</math>, 100 <math>\mu\text{L}</math> and 150 <math>\mu\text{L}</math> (optional).</li><li>- Racked Dilution Tubes for loading samples into the plate with a 12-channel pipette (optional).</li><li>- Orbital Plate Shaker (optional).</li></ul>

### Kit Specifications:

Plate Format:	- 96 Well.
Time Requirement:	- 2 h 15 min.
Detection Limit:	- 10 ppb.
Quantification Limit:	- 25 ppb.
Cross Reaction:	- Alachlor Mercapturate (10 ppb).
(Limit Of Detection)	- Atrazine Mercapturate (>10000 ppb).
	- Acetochlor Mercapturate (>1000 ppb).
	- Metolachlor Mercapturate (135 ppb).
	- Alachlor ESA (115 ppb).
	- Acetochlor ESA (>10000 ppb).
	- Metolachlor ESA (>10000 ppb).

Measurement:  
Product ID #:

- Microtiter Plate Reader or strip reader.
- BP001.