

Water Quality Testing



EnviroGard Diazinon Plate

Features

- rapid lab testing method for the analysis of drinking and waste water samples
- quantitative data results with excellent analytical precision
- test up to 88 samples at one time
- test results in about 120 minutes
- method training available
- microtiter plate immunoassay
- ideal for NPDES and other effluent monitoring

Test Result Type

Quantitative data.

Samples per Kit

96 Well Test Kit

Up to 88 samples

Assay Range

Test Range:
0.022 to 0.50 ppb
LDD = 0.022 ppb

Methods

Methods exist for water and waste water.

Sampling Time

“Sample-to-Data” in about 2 hours.



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PRODUCT PROFILE

Basic Test Procedure

- Prepare standards.
- Add 100 uL of sample or standard and 100 uL enzyme conjugate.
- Incubate for 1 hour.
- Decant and wash six times.
- Add 100 uL color solution.
- Incubate 30 minutes.
- Stop the reaction and read color at 450 nm.

Specificity

The proprietary antibody used in this assay is specific for diazinon. The cross-reactivity of the Diazinon EnviroGard® Plate Kit for various organophosphate analogues can be expressed as the least detectable dose (LDD) which is estimated at 85% B/B₀ and at the IC50.

Compound	LDD (ppt)	50% B ₀
Diazinon	22	100
Diazoxon	200	900
Pirimiphos-ethyl	1250	7000
Pirimiphos-methyl	900	5000

Test Kit Components

- Antibody coated microtiter plate strips, enzyme conjugate, color development and stop reagents for analysis of 96 wells.
- 100 ng/mL Stock Solution of Diazinon.
- Test kit instructions.

Storage & Precautions

- Shelf life is typically one year from date of manufacture, with specific kit expiration date information provided on product packaging.
- Reagents must be stored at 39° to 46°F (4° to 8°C) when not in use.
- Kits must be brought to 64° to 81°F (18° to 27°C) before use.
- Do not expose color solution to direct sunlight.

Other Required Materials

- 10 mL volumetric flask
- Positive-displacement pipette to deliver 50 µL
- Disposable-tip pipette to deliver 100 µL
- Pipette(s) which will measure 0.1 to 4.7 mL
- Deionized water for calibrator preparation
- Glass tubes or vials for calibrator preparation
- Tap or distilled water for rinsing wells
- Orbital shaker (optional)
- Microtiter plate reader or strip reader
- Multi-channel pipette (optional)
- Repeater pipette (optional)

Ordering Information

Diazinon EnviroGard Plate

pn. 72700

