

## MICROCYSTINS PLATE

Envirogard® is a rapid laboratory enzyme immunoassay method for the analysis of water. It uses a plate technology to detect the analyte of concern.

### Test result type

- Quantitative data

### Samples per kit

- 96 well test kit (tests up to 88 samples\*)

### Assay range

- 0.1 ppb to 2.0 ppb
- Extended range available

### Sampling time

- Sample-to-data in approximately 120 minutes

### Specificity

- The proprietary antibody used in this assay detects microcystins and nodularins. The crossreactivity of the Microcystins EnviroGard® Plate Kit for various microcystin variants is shown below at 50% B/B<sub>0</sub>.

- » Rapid lab testing method for the detection of microcystins and nodularins in drinking and environmental water samples
- » Conforms to ISO standards for environmental immunoassays such as ISO 15089
- » Quantitative data results with excellent analytical precision
- » Test up to 88 samples\* at once for increased cost efficiency
- » Results available in approximately 120 minutes
- » Microtiter plate immunoassay
- » Ideal for source water monitoring

\*Using three standards

### MICROCYSTIN VARIANTS (PPB)

Compound	%CR
Microcystin - LR	100
Microcystin - RR	73
Microcystin - YR	58
Microcystin - LA	2
Microcystin - LF	3
Microcystin - LW	4
NODLN	126

### Basic Test Procedure

- Prepare wash solution
- Add 50 uL enzyme conjugate
- Add 50 uL calibrators, controls, and samples
- Add 50 uL Antibody Solution (Reagent 2)
- Swirl plate
- Incubate for 30 minutes
- Wash plate
- Add 100 uL colour solution
- Incubate for 30 minutes
- Stop the reaction and read colour at 450nm



## Test kit components

- » Plate containing 12 strips of 8 wells coated with antibodies, negative control, 0.1, 0.3, 0.8 and 2.0ppb microcystin-LR surrogate (non-toxic) calibrators, enzyme conjugate, antibody solution (reagent 2), substrate, stop solution and 100x wash solution calibrator
- » Test kit instructions
- » 1.0 ppb Microcystin control

## 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
- » Store at ambient temperature 64° to 81°F (18° to 27°C) is acceptable for day of use for up to eight hours
- » Kits must be brought to 64° to 81°F (18° to 27°C) before use
- » Do not expose colour solution to direct sunlight

## Required test materials      Part #

- » Microcystins EnviroGard® plate      7540000A

## Required test equipment

- » 10 cc syringes
- » 0.45 micron non-sterile filter units
- » Pipette to deliver 100 ml
- » Distilled or DI water for rinsing wells and wash preparation (bottle needed)
- » Microtiter plate reader or strip reader
- » Timer
- » Parafilm or tape
- » Marker pen

## Other recommended materials

- » Orbital shaker
- » Multi-channel pipette
- » Repeater pipette
- » Calculator
- » Microtiter plate washer
- » Solid extraction devices