Affordable Assurance of Water Quality

Rapid Toxicity Testing for a Better Environment

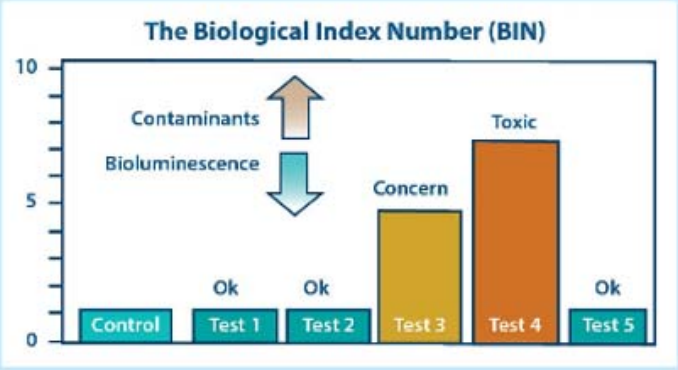
assure CONTROLS

Assure Controls is an innovator in aquatic biological testing and monitoring technology.

The QwikLite 200 Biosensor System is a breakthrough in water quality assessment, providing live species aquatic toxicity testing that is simple, cost-effective, and produces rapid, reliable results.

The QwikLite 200 Biosensor System brings digital precision and microprocessor power to aquatic biological testing, enabling faster and logical decision making, as well as affordable routine screening and monitoring.

For saltwater, freshwater and sediment samples, the QwikLite 200 Biosensor System uses reliable biological control groups as part of single-use disposable test kits. This provides the easiest, fastest, and only quantifiable result for aquatic biosensors today, the Biological Index Number (BIN), as well as the dilution series Inhibition Concentration (IC) endpoint.



Innovation

Patented technology uses sensitive plankton to assess presence and severity of toxicity from both inorganic and organic substances. Simply put, the bioluminescent plankton reduce their light production in direct relation to toxic stress in the water sample, and QwikLite 200 measures this inhibition of light production to provide a reliable measure of toxicity.

Advantages of Water Toxicity Testing with QwikLite:

- **Responsive**: sensitive phytoplankton (dinoflagellates), shorten test times
- **Quantified**: biological adverse effects are measured and displayed
- **Wide Range of Application**: freshwater, saltwater, sediments
- **Cost Effective**: a fraction of the cost of existing methods
- **Easy to Use Test Kits**: packaged, convenient, and low maintenance species
- **Automated Operation**: step-by-step biological testing procedures built in
- **Stores Thousands of Tests**: files transferred via USB to PC or flash drive
- **Faster**: less than 24 hours for results versus several days for traditional test results

The QwikLite 200 Biosensor System will detect any contaminant, or combination of contaminants, that are present at a level that is biologically harmful to the test culture. Examples include:

Organic Materials	Inorganic Materials	Heavy Metals
Fluoranthane	Arsenic	Copper
Tributyltin	Chlorine	Nickel
Chlorothanolil	Perchlorate	Cadmium
Polycyclic Aromatic Hydrocarbons (PAHs)	Diuron	Zinc
Polychlorinated Biphenyls (PCBs)		

Applications for Toxicity Testing with QwikLite:

- Effluent discharge, biological endpoint tests, dilution tests
- Toxicity Identification Evaluation (TIE)
- Ballast Water Treatment System efficiency verification
- Ballast Water Treatment discharge toxicity tests
- Nonpoint source effects, determination, and identification
- Ambient water quality monitoring: rivers, lakes, harbors, bays, groundwater wells, etc.
- Industrial process assessments of complex mixtures
- Episode response (spills, leaks) effects, mapping, and determination

1 Prep

Cultures placed in light-dark incubator 1 day before use.

2 Dose

Cultures mixed with water samples. Light cycle resumed.

3 Test

Automated testing, approx. 3 minutes per cartridge.

Parts Numbers and Ordering Information:

QwikLite™ 200 Biosensor System	QL 200
QwikLite™ 200 Accessory Kit	QAK 100
QwikLite™ 200 Test Cartridge	QTC 100-FW (freshwater) QTC 100-SW (marine)

Assure Controls, Inc.
2440 Grand Avenue, Suite A
Vista, California 92081, USA
Phone: 760-505-3000 Fax: 760-306-7872
Email: info@assurecontrols.com
www.assurecontrols.com

ASTM Standard E1924-97 (2004) "Standard Guide for Conducting Toxicity Tests with Bioluminescent Dinoflagellates" was reviewed and approved in 1997 and, reapproved in 2004 and 2010. The ASTM E1924 test method provides a rapid toxicity response indication by measuring the reduction in bioluminescence of the plankton. ASTM Standards and Test Methods are copyrighted by ASTM International and protected by U.S. and International law. In 2006, this technology was made commercially available under the Federal Transfer of Technology Act. The United States Navy holds the original patents to the technology.