

PRODUCT DATASHEET

NitriTox

ONLINE TOXICITY ANALYZER

Online Toximeter that protects the biology of wastewater treatment plants.



Highly Sensitive

Fast And Precise

**Self-Regenerating
Bacteria**

Applications

- Water Influent
- Industrial Wastewater
- Protection of biological treatment

Online Toximeter that protects the biology of waste water treatment plants!

LAR's toxicity analyzer NitriTox continually monitors water treatment plants for pollutants. Potential toxins in water are determined through the reaction of highly sensitive bacteria. The measurements follow at intervals of less than 5 minutes. Thus allowing enough time to introduce countermeasures after the occurrence of pollu-

tion. NitriTox contains a bacteria culture which constantly and independently produces biomass. This means that there is always enough bacteria for each new measurement. As every water sample is tested with a fresh amount of bacteria, the risk of the fermenter being contaminated is removed.

Applications

Nitrification is the phase of biological wastewater treatment in which bacteria oxidize ammonium to nitrate. Toxic loads affect the bacteria and thus the treatment process. LAR's NitriTox is used to protect these bacteria.

- Water influent
- Industrial waste water
- Protection of biological WWTP

Features

As every water sample is tested with a fresh amount of bacteria, any toxic event can be monitored from start to finish, without interference to the test organisms through the appearance of a toxicity.

- Continuous monitoring of Toxicity
- Self-regenerating bacteria within the analyzer
- Response time in 5 minutes

Benefits

LAR's NitriTox is capable of rapid toxicity monitoring, which is important for the protection of biological wastewater treatment processes. And that, without the purchase or cultivation of test organisms.

- Low cost of ownership
- No purchase of test organisms necessary
- Low maintenance
- Early-warning system



Technical Data

Measurement Technique and Sample Preparation

Measurement Method	Determination of toxicity through the measurement of oxygen conversion
Measurement Compliance	According to DIN EN ISO 9509:2006
Measurement Ranges	0-100 % Toxicity
Sensitivity	0% Toxicity
Oxidation Principle	Determination of inhibition of respiration with nitrifying bacteria
Accuracy	10-15% Toxicity
Repeatability	10-15% Toxicity
Cycle Time	12-15 Min
Response Time	5 Min (application dependent)
Bacteria Culture	Nitrifiers
Particle Size	Soft particles max. 2mm

Temperature and Humidity

Permissible Sample Temperature	5 - 25°C / 41°F - 77°F
Ambient Temperature recommended	10 - 25 °C / 50°F - 77°F
Ambient Air Humidity	Max. 80% (non condensing)

Dimensions and Weight

Housings	Steel, coated with powder paint, IP54 (further on request)
Dimensions	W 630 x H 1265 x D 580 mm W 49.8" x H 24.8" x D 22.8"
Weight	70 kg / 154.3 lbs approx.

Electric and Hydraulic Specifications

Inflow and Outflow	Tube 6 mm ID and 8 mm ID
Power Supply	230 / 115 V~, 50 / 60 Hz, 100 VA
Analogue Output	0/4 - 20 mA
Serial Interface	RS 232, combined alarms, Life-Zero, USB
Safety	10 A internal, 16 A external
Options	Remote control via TCP/IP protocol, Sample taking system FlowSampler, Air Treatment

Equipment Devices and Data Output

High resolution and back-lit TFT touch screen graphic display, 10.4"
Self explanatory software and service checklist; Autostart funktion
Standard data interfaces, e. g. office PC

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