

HY-LiTE® Free ATP Pens

Ready prepared Pens for applications like biomass monitoring in biocide water treatment by measuring with the HY-LiTE® 2 luminometer.

Typical composition

Adenosine triphosphate (ATP) is detected specifically by reaction with a luciferin/luciferase reagent in buffered solution. Compared to item 1.30102, the white sampling stick of Free ATP pens 1.30194 does not contain a lysis reagent. Therefore bacterial cells are not lysed and only the free ATP in solution is measured.

A comparative measurement using the HY-LiTE® pen 1.30102 can provide information on the proportion of cellularly bound ATP.

Features and benefits

- Dedicated pen for liquid testing
- Main application for biomass testing in water treatment, especially for biocides, which are acting by cell lysis
- Dilution factor and unique buffer eliminates interference
- Test procedure takes less than 1 minute
- Patented uptake of sample volume
- Long shelf-life

Experimental procedure

To assess the effectiveness of the lysing effect of a Biocide, one usually tests the proportion of Free ATP (Read result from measurement with item 1.30194) compared to Total ATP (as measured with item 1.30102).

Dip the white stick of the pen into the liquid sample for 1 second, and press the stick home into the Pen cuvette. Press and twist (screw) the upper part of the Pen until it contacts the lower part. Shake the Pen, then put into luminometer for measurement. Close lid and read the result on the display.

Specification

Application	Primarily examination of biomass in biocide water treatment application
Format	Ready prepared cuvette test format for use with HY-LiTE® 2 luminometer
Reagent	Contains freeze-dried and stabilized luciferin/luciferase reagent (U.S. patents 5583024, 5674713, 5700673)
Test parameter	Free ATP
Detection limit	1.4×10^{-14} mol ATP
Interference	For normal application within clean production areas no interferences will occur, due to the built-in dilution step and the unique buffering capacity of the HY-LiTE® pen
Ambient conditions	Measurements at 5-35 °C
Storage conditions	The test pens are stable up to the date stated on the pack, when stored closed at +2 to +8°C. The shelf-life includes a period of transport or storage of up to 3 weeks at room temperature
Disposal	HY-LiTE® pens can be disposed off with the normal household waste.

Literature

DE ZUTTER, L., HELLWIG, K., a. LINDHARDT, C.: ATP method is highly suitable for hygiene monitoring (translated from the Dutch original) - De Keurmeester, 3; 5-10 (1998)

Ordering Information

Product	Merck Cat. No.	Pack content
HY-LiTE® Free ATP Pens	1.30194.0021	50 CIP / liquid test "free ATP" pens