

# BACTERIAL CONTAMINATION SCREENING KIT

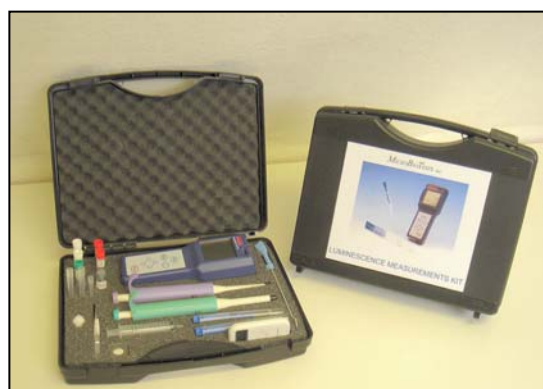
for ultra-rapid on-site screening of water  
for contamination by bacteria and biological residues

The tests are based on chemical ATP measurements with dipsticks in a portable luminometer



Each kit contains all the materials and reagents required to perform contamination analysis of 20 water samples

The luminometer and various additional items for test performance are enclosed in a small lightweight "Luminescence Measurement Case"



# BACTERIAL CONTAMINATION SCREENING KIT

## ultra-rapid on-site screening microbiotests for contamination of waters by bacteria and biological residues

*The BACTERIAL CONTAMINATION SCREENING KIT is a “field test kit” containing all the materials and reagents to perform contamination analyses of 20 water samples. Easy to follow instructions with detailed illustrations are provided within the kits for the conduct of the ultra-rapid field assays. The tests are based on chemical ATP measurements in special tubes with reagents, which are recorded in a portable luminometer.*

### **Test criterion**

- The ATP originating from bacteria and of biological residues is brought into contact with an ATP reagent which produces luminescence that is subsequently measured and recorded in the luminometer in RLU (Relative Light Units). The amount of light produced reflects the richness of the water sample in contaminating microbes and biological residues.
- The assays can be performed in two ways :
  - a direct test which measures both the intracellular microbial ATP and the extracellular ATP from biological residues
  - a membrane filter test which only measures the intracellular microbial ATP

### **Reproducibility**

- All the tubes with reagents are prepared in a strictly controlled procedure and contain exactly the same amount of reagents, which precludes variability associated with the preparation of the test materials.
- The very simple test procedures contribute to the high precision of the assays.

### **User friendliness/Cost-effectiveness**

- The set up and measurements take only a few minutes allowing the user to

analyse many water samples in a very short period of time.

- The procedures are very simple and can be performed in the field “anytime, anywhere”.
- The assays can be performed “at ambient temperature” within the range 15°C to 25°C.
- The tubes with reagents are low-cost disposable items, which bypass tedious and time consuming washing and cleaning steps subsequent to testing.

### **Contents**

- The Bacterial Contamination Screening Kit contains 10 “Unit” boxes for analysis of 2 water samples each.
- The kit is provided with a detailed Standard Operational Procedure brochure, an abbreviated Bench Protocol, data scoring sheets and a specification sheet with the batch number of the tubes with reagents.

### **Shelf life**

- The Unit boxes must be stored in the refrigerator (2-8°C) prior to use.
- When stored properly, the tubes with reagents have a shelf life for 6 months up to one year.

### **Sensitivity**

- The ATP reagent is very sensitive, and gives luminescence even for very low ATP concentrations. It therefore detects very low numbers of bacteria and contaminating biological residues.

### **Supporting equipment**

- The portable luminometer is enclosed in a small lightweight “Luminescence Measurement Case” which also contains additional items for performance of the “membrane filter” test procedure.