



## Who can use MBS-HACCP&WATER Easy test<sup>®</sup>

### ANYBODY

With **MBS-HACCP&WATER Easy Test<sup>®</sup>** the analysis of solid and liquid food, water and surfaces can be performed by anybody in a simple and error-free way.

### PARTICULARLY

#### LABORATORIES

By using **MBS-HACCP&WATER Easy Test<sup>®</sup>** laboratories can carry out microbiological controls of solids, liquids, food, water (drinking, surface, waste, process, etc.) and surfaces or tools, with net savings of skills, costs and time.

#### FOOD COMPANIES AND HACCP

**MBS-HACCP&WATER Easy Test<sup>®</sup>** allows at food producers of all sizes and types independently to carry out microbiological analysis without the routine use of a laboratory and specialized personnel.

#### DIETARY, NATURAL FOOD AND COSMETICS

By using **MBS-HACCP&WATER Easy Test<sup>®</sup>** can perform the microbiological control of food supplements, herbal products and remedies, biological food, etc. It can also analyze cosmetics, creams, lotions and galenic preparations.

#### WATER

By using **MBS-HACCP&WATER Easy Test<sup>®</sup>** any kind of water (potable, superficial, waste water, etc.) can be analyzed anywhere and even by unskilled personnel.

#### FIELD ANALYSIS

By using **MBS-HACCP&WATER Easy Test<sup>®</sup>** water and food can be analyzed in any emergency situation (developing countries, natural disasters, humanitarian operation, military and civil protection, etc.).

**MBS**  
MICRO  
BIOLOGICAL  
SURVEY

**MBS** is a company born from a collaboration between university and entrepreneurship.

**MBS** is the best demonstration of the potential for technology transfer of university research that has important consequences for the economic and social development.

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**MBS**  
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## MBS-HACCP&WATER Easy test<sup>®</sup>



**THE LAB IN A VIAL**

## MBS-HACCP&WATER Easy test<sup>®</sup>

**MBS-HACCP&WATER Easy test<sup>®</sup>** is a new patented product for **HACCP** and microbiological analysis of **liquid and solid food, surfaces and water**, enabling a significant time reduction, lower cost and requiring fewer skills compared to all other microbiological methods of analysis normally used.

The method of analysis is based on the observation of the change of color in the suspension formed in the analysis vial used when the test sample is added: the suspension changes color (turns) if there are microorganisms, the greater the amount of microorganisms, the more rapid the change of color.

The MBS method has been validated according to ISO 16140:2003 "Microbiology of Food and Animal Feeding Stuffs – Protocol for the validation of alternative methods"; it has demonstrated the full equivalence of the MBS method with the corresponding reference method.

**MBS-HACCP&WATER Easy test<sup>®</sup>** allows the detection and selective count of principal microorganism contaminants on surfaces, agro-food products and water, such as:

- ▶ **Total Viable Count**
- ▶ **Coliforms and *E. coli***
- ▶ **Enterobacteriaceae**
- ▶ ***Staphylococcus aureus***
- ▶ ***Pseudomonas aeruginosa***
- ▶ ***Salmonella* spp.**
- ▶ ***Listeria* spp.**
- ▶ ***Enterococcus faecalis***

...others



## MBS-HACCP&WATER Easy test<sup>®</sup>

THE MICROBIOLOGICAL ANALYSIS IS AVAILABLE FOR EVERYONE: RAPID, EASY AND CHEAP.



It is possible to analyze **liquid** and **solid samples** without any specific pre-treatment. It can also perform analysis of **surfaces**.

**The presence of microorganisms cause the change of color of the vial contents (turns): the greater the amount of microorganisms, the less time taken to change of color. The absence of color change indicates the absence of the microorganisms in the sample.**

No other product has all the following characteristics in the same time:

### SPEED

The time required for analysis, preparation and results acquisition are 2-5 times lower in respect to the traditional methods.

### EASE OF USE

Anyone, anywhere, can perform the analysis without using other reagents or instruments.

### PRECISION

Up to the statistical limit of only one microorganism in the sample.

### SELECTIVITY

Up to the experimental limit of 99.999% towards other bacterial species.

### COST

The analysis costs are 2-4 times lower than the traditional methods, which have to be performed by specialists in laboratories equipped with specific instruments.

### Kit

The kit comes in a pack containing all the material necessary for the analysis: the **reaction vial** specific to each microorganism to be tested and distinguishable from the color of the cap and a **vial of sterile distilled water**.

After the insertion of the sample, the vials of analysis are placed in a thermostatic incubator or in a **MBS-MultiReader** device.

## Analysis's phases

The performance analysis can be summarized in a few phases: opening, insertion of the sample, start analysis, color observation, stop analysis and final sterilization.



**Post-analysis sterilization** is performed by exerting gentle pressure on the cap and allows the safe disposal of the vial.



# MBS-MultiReader



The **MBS-MultiReader** device automates the analysis process by allowing the execution of multiple tests at the same time, without having to check the color change of the vials.



**MBS-MultiReader** automatically provides the number of microorganisms present in the sample. The device is connected and controlled by a computer with a specific software. When the test is finished, the Analysis Report is generated and it can be printed.



Kit for **field analysis**