

SPEED

RELIABILITY

SPECIFICITY



**MICA**  
*Advance*

*Alicyclobacillus*



## *Alicyclobacillus* guaiacol +

Detects the presence of *Alicyclobacillus* guaiacol positive (including *A. acidoterrestris*)

Fruit juice  
Flavoured waters  
Other fruit drinks  
Raw materials (Purees, Hydrolats, ...)

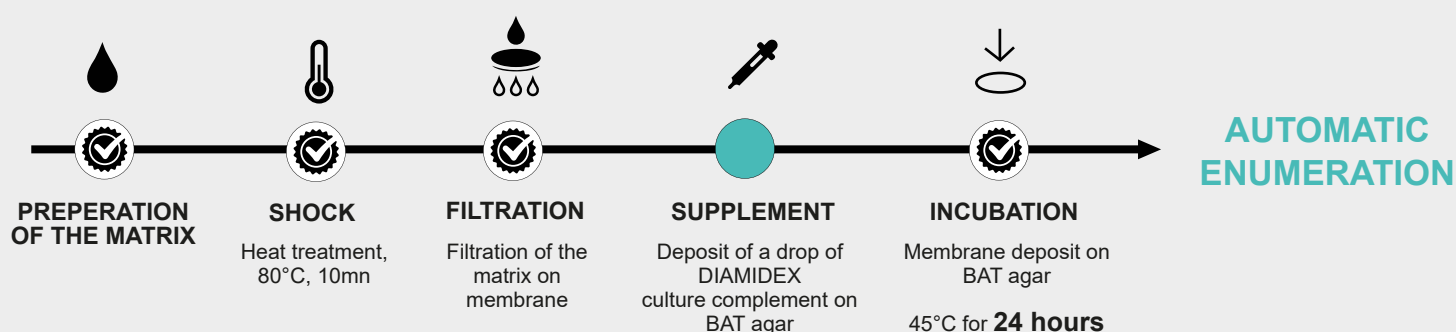
- ✓ **Filterable and non-filterable matrices**
- ✓ **Result in 1 day only for filterable samples, against 5-9 days with the standard method**
- ✓ **Result at from 2 days only for non-filterable samples, against 10-14 days with the standard method**
- ✓ **Same procedure as the standard method**  
IFU No. 12: 2019
- ✓ **No confirmation test needed**
- ✓ **Up to 250 analyses per 8 hour period**
- ✓ **Non-destructive method**
- ✓ **Limit of detection:**  
1 CFU\* / per membrane



AOAC certification  
in progress

CE UK  
CA

## Protocol based on the **IFU No. 12:2019** method



\*CFU : Colony Forming Unit

More info

> [diamidex.com](http://diamidex.com)

## MATRICES TESTED

Tested on **18** types of matrices.

**11%**

Raw materials

**6%**

Flavoured waters

**6%**

Other drinks  
fruit-based

**77%**

Fruit juice  
(Orange, Apple,  
Peach, Apricot...)

**243**  
samples

## INCLUSIVITY / EXCLUSIVITY

| SPECIES / SEROGROUPS                      | NUMBER OF STRAINS | ORIGIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DETECTION WITH MICA <i>Alicyclobacillus</i> |
|-------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| <i>Alicyclobacillus</i> <b>guaiacol +</b> | <b>4</b>          | <i>Alicyclobacillus acidoterrestris</i> (ATCC 49025), <i>Alicyclobacillus acidiphilus</i> (DSM 14558), <i>Alicyclobacillus hesperidum</i> (DSM 12766), <i>Alicyclobacillus herbarius</i> (DSM 13609)                                                                                                                                                                                                                                                                                                | <b>+</b>                                    |
| <i>Alicyclobacillus</i> <b>guaiacol -</b> | <b>1</b>          | <i>Alicyclobacillus acidocaldarius</i> (DSM 446)                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>-</b>                                    |
| <b>Other species</b>                      | <b>16</b>         | <i>Acetobacter aceti</i> , <i>Aspergillus brasiliensis</i> , <i>Bacillus coagulans</i> , <i>Bacillus subtilis</i> , <i>Candida albicans</i> , <i>Candida krusei</i> , <i>Gluconobacter liquefaciens</i> , <i>Gluconobacter oxydans</i> , <i>Lactobacillus casei</i> , <i>Lactobacillus plantarum</i> , <i>Listeria monocytogenes</i> , <i>Micrococcus luteus</i> , <i>Saccharomyces cerevisiae</i> , <i>Salmonella typhimurium</i> , <i>Staphylococcus aureus</i> , <i>Zygosaccharomyces bailii</i> | <b>-</b>                                    |

## COMPARISON WITH IFU No. 12:2019

Tested on **243** sample comparisons according to MICA *Alicyclobacillus* and IFU No. 12: 2019 protocol.

|                                                       | MICA         | IFU 12       | Guaiacol test positive |
|-------------------------------------------------------|--------------|--------------|------------------------|
| <b>Presence of <i>Alicyclobacillus</i> Guaiacol +</b> | detected     | detected     | <b>+</b>               |
| <b>Présence d'<i>Alicyclobacillus</i> Guaiacol -</b>  | not detected | detected     | <b>-</b>               |
| <b>Absence of <i>Alicyclobacillus</i></b>             | not detected | not detected |                        |

**Specificity:** 96%  
**Sensitivity:** 100%  
**NPV:** 100%  
**PPV:** 95.5%

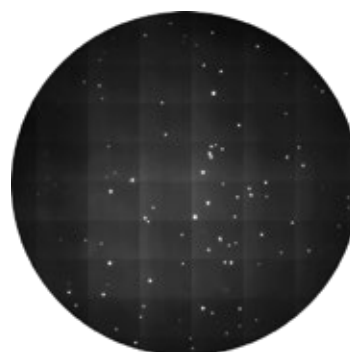
## SAMPLE RESULT: *Alicyclobacillus* Guaiacol + at 24h

Photo of the membrane



Invisible to the naked eye

Membrane scan with  
MICA *Fluorescence*



Visible with the MICA counter

VS