



SPEED

RELIABILITY

EASE OF USE

MICA
Fluorescence

Alicyclobacillus

Alicyclobacillus guaiacol positive

Including *A. acidoterrestris*



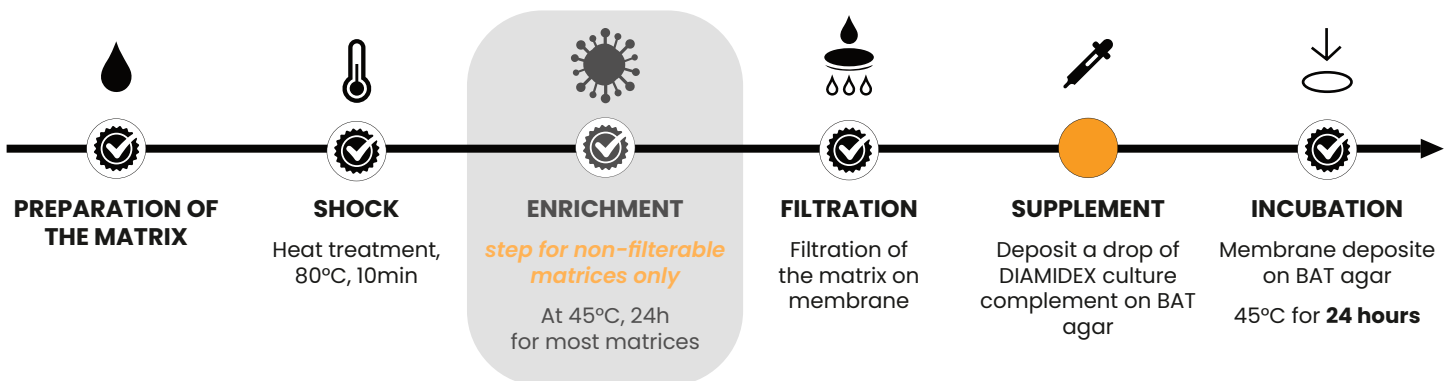
Fruit juice
Flavoured waters
Other fruit drinks
Raw materials (Purees, Hydrolats, ...)

- ✓ **24 hours of incubation only**, against 5 to 14 days with the standard method
- ✓ **No confirmation test needed**
- ✓ **Same procedure as the standard method** IFU No. 12:2019
- ✓ **4' labor time per analysis against 8'** on average with the standard method
- ✓ **Only one agar plate per sample**, versus 1 to 3 with the standard method
- ✓ **Filterable and non-filterable matrices**
- ✓ **Easy-to-use user interface**
- ✓ **Non-destructive method**
- ✓ **Limit of detection: 1 CFU*/per membrane**

CE UK CA

*CFU: Colony Forming Unit

Protocol based on the IFU No. 12:2019 method



**AUTOMATIC ENUMERATION
GUAIACOL POSITIVE RESULT IN**

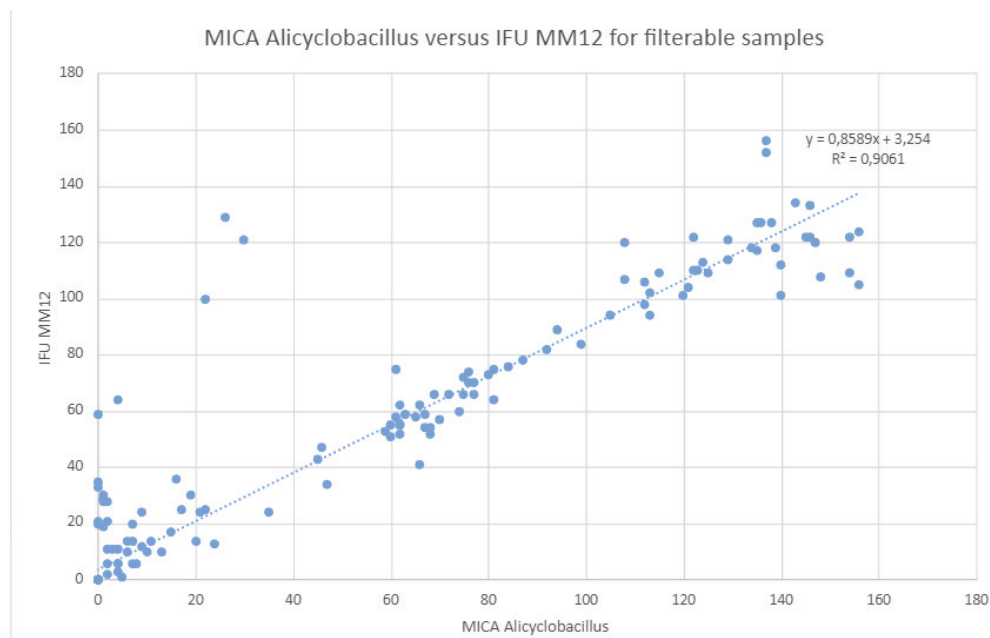
3 minutes

COMPARISON WITH IFU No. 12:2019

Tested on **473** sample comparisons according to MICA Alicyclobacillus and IFU No. 12: 2019 protocol.

	IFU 12	MICA
Presence of Alicyclobacillus Guaiacol positive	Detected <i>Confirmation needed by Guaiacol test</i>	Detected <i>No confirmation needed</i>
Presence of Alicyclobacillus Guaiacol negative	Detected <i>Confirmation needed by Guaiacol test</i>	Not detected <i>No confirmation needed</i>
Absence of Alicyclobacillus	Not detected	Not detected

Sensitivity96%
 Specificity99%
 NPV94%
 PPV100%



SAMPLE RESULT

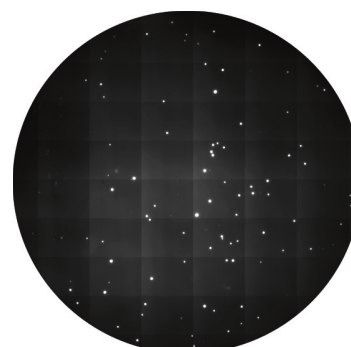
Alicyclobacillus guaiacol positive at 24h

Photo of the membrane



Invisible to the naked eye

Membrane scan with MICA Fluorescence

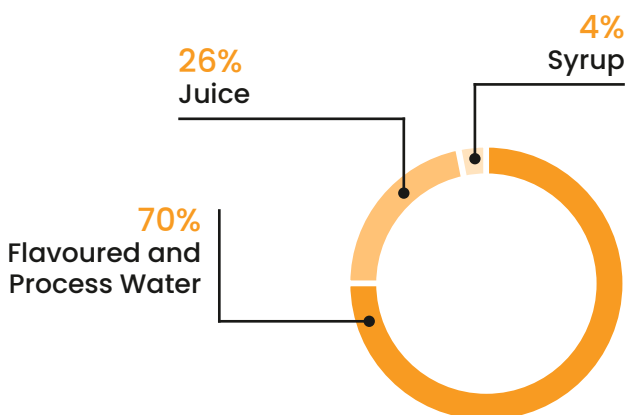


Visible with the MICA counter

MATRICES TESTED

Filterable tested matrices

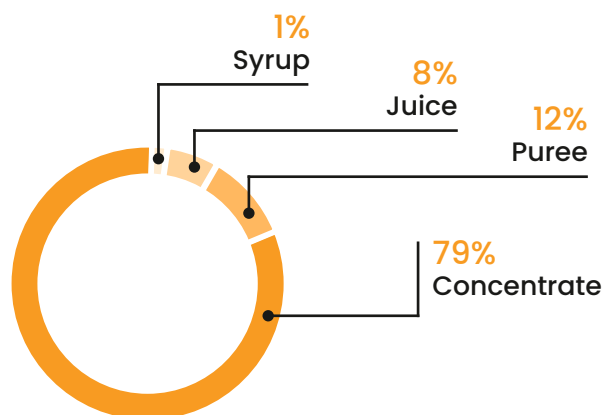
265 different samples



Sensibility	97%
Specificity	99%
Positive predictive value	100%
Negative predictive value	92%

Non-filterable tested matrices

208 different samples



Sensibility	95%
Specificity	100%
Positive predictive value	100%
Negative predictive value	98%

INCLUSIVITY / EXCLUSIVITY

	Number of strains	Origin	Detection with MICA Alicyclobacillus
<i>Alicyclobacillus</i> gaiacol positive	30	<i>A. acidoterrestris</i> DSM 3922, 3923, 3924, 2498, NRBC 106287, 106288, 106289, 106290, 106291, 106292, 106293, 106294, 106295, 106296, 106297, 106298, 106299, 106300, 106301, 106302 <i>A. acidiphilus</i> DSM 14558 <i>A. herbarius</i> DSM 13609 <i>A. suci</i> DSM 112017 <i>A. acidoterrestris</i> environmental strains x7	Yes
<i>Alicyclobacillus</i> gaiacol negative	59	<i>A. acidocaldarius</i> DSM 446, 448, 449, 455, NRBC 111244 <i>A. hesperidum</i> DSM 12766 <i>A. contaminans</i> DSM 17975 <i>A. spp.</i> environmental strains x37 <i>A. acidocaldarius</i> environmental strains x9 <i>A. cycloheptanicus</i> environmental strains x2 <i>A. pomorum</i> environmental strain <i>A. hesperidum</i> environmental strain <i>A. acidiphilus</i> environment strain <i>A. sendaiensis</i> environmental strain	No
Other strains	16	<i>A. acetii</i> ATCC 15973, <i>A. brasiliensis</i> ATCC 16404, <i>B. coagulans</i> ATCC 7050, <i>B. subtilis</i> ATCC 6633, <i>C. albicans</i> ATCC 10231, <i>C. krusei</i> ATCC 14243, <i>G. liquefaciens</i> ATCC 14835, <i>G. oxydans</i> ATCC 19357, <i>L. casei</i> ATCC 393, <i>L. pantarum</i> ATCC 8014, <i>L. monocytogenes</i> ATCC 35152, <i>M. luteus</i> ATCC 10240, <i>S. cerevisiae</i> ATCC 9763, <i>S. typhimurium</i> ATCC 13311, <i>S. aureus</i> ATCC 6538, <i>Z. bailii</i> DSM 70492	No

More info

> diamidex.com