SPEED

RELIABILITY

SPECIFICITY

MICA
Fluorescence

Alicyclobacillus

Alicyclobacillus guaiacol +

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

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

- **24 hours of incubation only,** against 8 to 14 days with the standard method
- **No confirmation test needed**
- **Same procedure as the standard method** IFU No. 12: 2019
- **Filterable and non-filterable matrices**
- **Non-destructive method**
- **Limit of detection: 1 CFU* / per membrane**

AOAC

AOAC certification in progress

CE | UKCA

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

PREPERATION OF THE MATRIX

SHOCK
Heat treatment, 80°C, 10mn

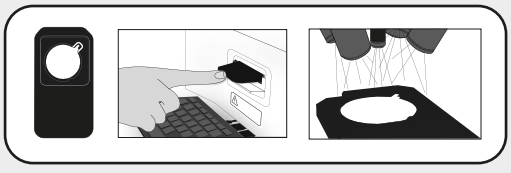
FILTRATION
Filtration of the matrix on membrane

SUPPLEMENT
Deposit of a drop of DIAMIDEX culture complement on BAT agar

INCUBATION
Membrane deposit on BAT agar

45°C for **24 hours**

Automatic detection in **3 minutes**

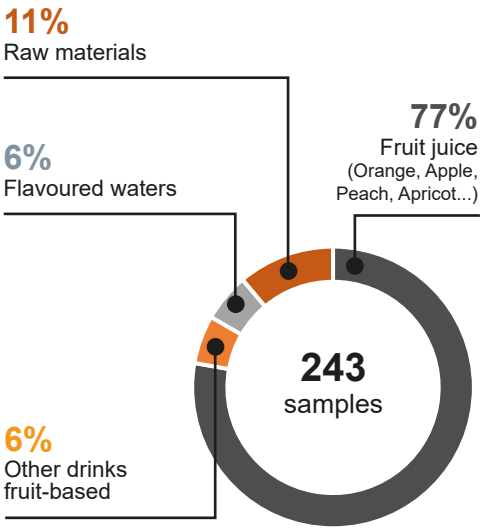


**CFU : Colony Forming Unit*

More info > diamidex.com

MATRICES TESTED

Tested on **18** types of matrices.



INCLUSIVITY / EXCLUSIVITY

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

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
Presence of *Alicyclobacillus* Guaiacol +	detected	detected	+
Présence *d'Alicyclobacillus* Guaiacol -	not detected	detected	-
Absence of *Alicyclobacillus*	not detected	not detected	

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

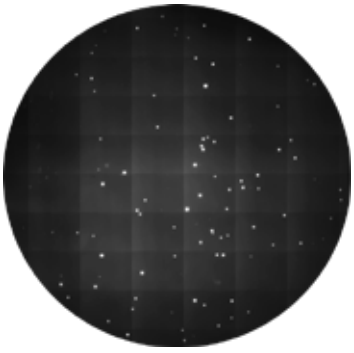
SAMPLE RESULT: *Alicyclobacillus* Guaiacol + at 24h

Photo of the membrane

Invisible to the naked eye

VS

Membrane scan with MICA *Fluorescence*



Visible with the MICA counter