

PRODUCTIVITY

RELIABILITY

SPECIFICITY



MICA
Advance
Legionella



Legionella pneumophila

Domestic Hot Water (DHW)
Cooling Tower Water

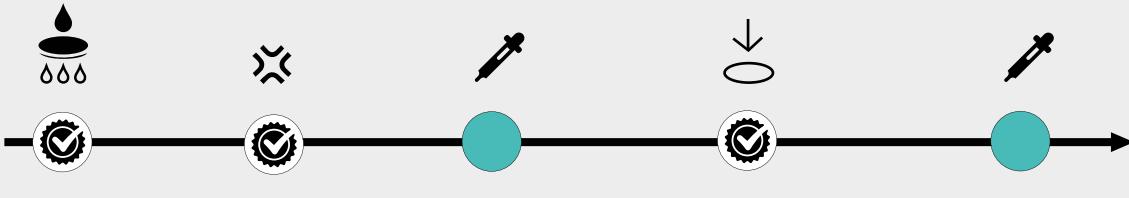
- Results equivalent to ISO 11731 standard method**, in CFU/l, but simpler procedure
- Detects and counts exclusively *L. pneumophila*, all serogroups**
- 4' of labor time per analysis** against 25' on average with the standard method
- No additionnal confirmation required**
- Up to 500 analyses per 8 hours**
- Only one GVPC plate per sample**, vs 5 to 10 with standard method
- Delivers results after only 48 hours of incubation**, against 10 to 14 days with the standard method
- Limit of detection:**
1 CFU* / liter for domestic hot waters
100 CFU* / liter for cooling tower waters



Interreg
North-West Europe
Water Test Network

MICA Legionella** technology
certified by AOAC

Protocol based on the ISO 11731 method



FILTRATION
Preparation of a
GVPC plate per
sampler

ACID SHOCK
Acid treatment
and rinsing of
membranes

SUPPLEMENT
Deposit of a drop
of DIAMIDEX
complement of
culture on GVPC
plate

INCUBATION
Membrane deposit on
GVPC plate at 37 °C
(with preliminary
thermal shock for
analysis of dirty water)

REVELATION
Tagging of
microcolonies with
DIAMIDEX marking
medium and rinsing
of membranes

For 48 hours

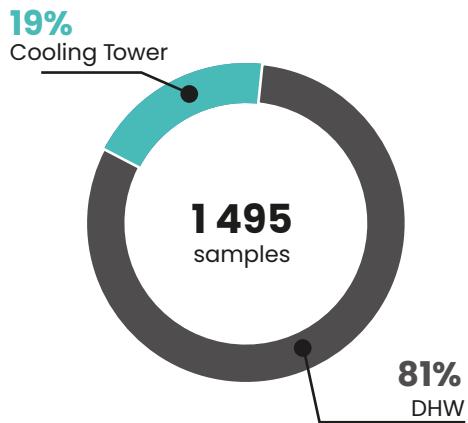
**AUTOMATIC
ENUMERATION**
in CFU/liter

More info

> diamidex.com

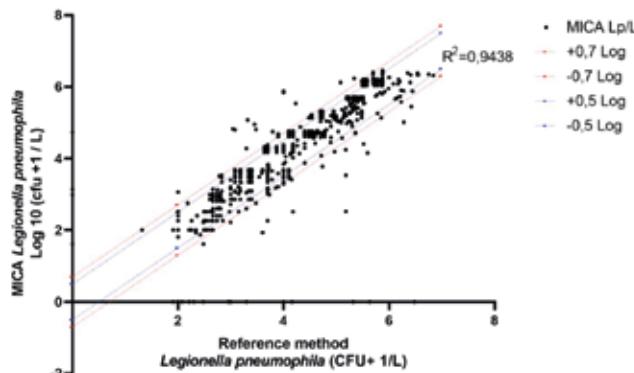
MATRICES TESTED

Domestic hot water (DHW) and Cooling tower water.



COMPARISON WITH ISO 11731

Tested on 1,495 comparisons of domestic water samples and cooling tower water, according to the MICA Legionella and ISO 11731 protocols.



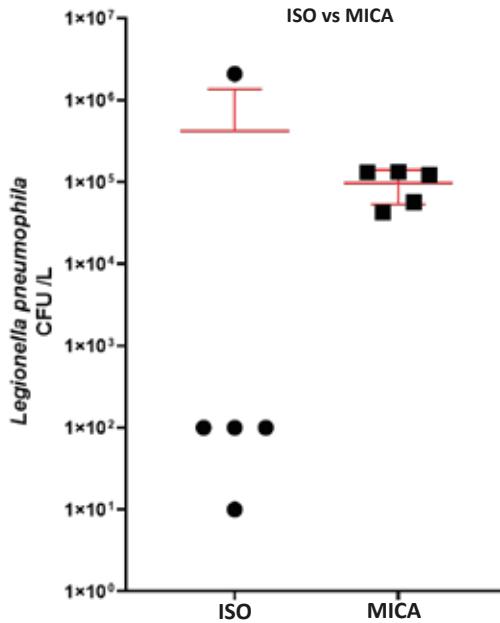
Specificity: 99.7%
Sensitivity: 96.2%
NPV: 95%
PPV: 99.8%

INCLUSIVITY / EXCLUSIVITY

SPECIES / SEROGROUPS	NUMBER OF STRAINS	ORIGIN	DETECTION WITH MICA
<i>L. pneumophila</i> - Serogroup 1	9	ATCC 33152, CIP 107629, CIP 108286, CIP 105349 + 5 environmental strains	+
<i>L. pneumophila</i> - Serogroups 2-15	23	ATCC 33154, ATCC 33155, ATCC 35289, DMS 25225, ATCC 43703 + 18 environmental strains	+
<i>Legionella spp.</i>	15	<i>L. anisa</i> , <i>L. bozemanii</i> , <i>L. cincinnatensis</i> , <i>L. feeleii</i> , <i>L. geestiana</i> , <i>L. gormanii</i> , <i>L. jordanis</i> , <i>L. longbeachae</i> , <i>L. maceachernii</i> , <i>L. micdadei</i> , <i>L. moravica</i> , <i>L. nagasakensis</i> , <i>L. spiritensis</i> , <i>L. tucsonensis</i> , <i>L. waltersii</i>	-
Other species	13	Acinetobacter baumanii, Bacillus cereus, Candida albicans, Citrobacter freundii, Escherichia coli Migula, Enterococcus faecalis, Listeria monocytogenes, Pseudomonas aeruginosa, Pseudomonas fluorescens, Staphylococcus aureus, Staphylococcus epidermidis, Klebsiella pneumoniae, Salmonella typhimurium	-

VARIABILITY OF RESULTS

Real cooling tower water sample divided into 10 equal portions and sent to 5 COFRAC laboratories for analysis using the ISO 11731 reference method and 5 analyses with MICA Legionella produced by DIAMIDEX.



* CFU: Colony Forming Unit

** MICA Advance uses MICA technology with a counter allowing automatic loading.