



## Automated Microbiology for Food Safety and Product Quality



**NEOGEN**<sup>®</sup>

**nirco**  
Diagnóstico & Investigación



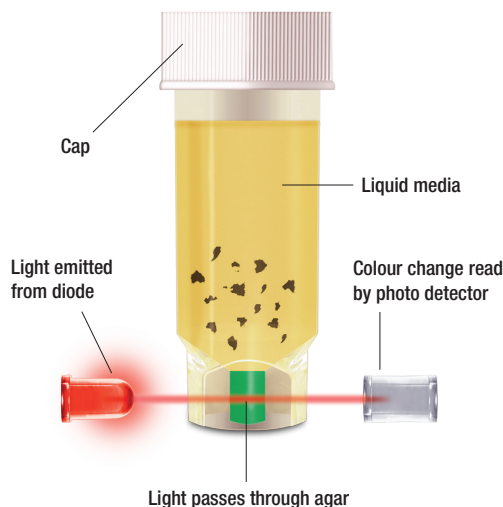
*Microbiology at the speed of light.®*

## How it works:

From samples to results. From results to knowledge. Optical technology and Soleris vials help get you there faster, with less sample handling, less labour, and less chance for error.

The heart of the Soleris system is its ready-to-use vials. The unique vial technology measures microbial growth by monitoring pH changes and other biochemical reactions. Here's how:

- Samples of up to 5 ml are added to the vials prefilled with microbial growth medium.
- Soleris monitors changes in the chemical characteristics of the medium, and reagents change colour as metabolic processes occur.
- Optical changes are monitored every six minutes in the vial's agar plug, which is separated from the sample to eliminate interference.
- Changes in colour, expressed as optical units, are sensed by the photo detector and recorded in the computer.
- The higher the number of organisms, the faster the detection time.



“ The Soleris method is easy to implement: 5 mL are inoculated into a ready-to-use broth. The optical reading and interpretation of the results are performed automatically (without visual assessment). The results obtained are plotted, and the growth curve allows additional information to be obtained for the interpretation of results. ”

Laboratoire de Microbiologie d'Actalia Cevalait.

## Accelerated results—Soleris reduces testing time

Test type	Typical specification levels	Traditional methods time to results	Soleris total test time to negative or below specification results	Soleris early alert time for positive results
Total Viable Count (TVC)	<10,000	72 hours	24 hours	6 to 8 hours
Coliforms	<10	24 hours	14 hours	6 to 10 hours
<i>E. coli</i>	negative	24 hours	18 to 24 hours	6 to 10 hours
Yeast and Mould	<100	5 days	48 hours	14 to 48 hours
Lactic Acid Bacteria	<100	3 to 5 days	48 hours	30 to 35 hours
Osmophilic Yeast	<100	5 to 7 days	96 hours	50 to 70 hours
Enterobacteriaceae	<100	24 hours	14 hours	6 to 10 hours
Direct <i>Alicyclobacillus</i> (ACB)	<100	5 days	48 hours	10 to 48 hours

### Proven matrices.

Yeast and mould in yoghurt • Sterility in aseptically-packaged products • TVC in nutraceuticals • Lactics in dressings • Aciduric organisms in high acid juices and many more.



# So many benefits. So little time needed

Soleris rapid microbiology provides reliable results faster—impacting operations in a variety of ways:

## Improved efficiency and throughput

- Expedite screening of ingredients and raw materials
- Earlier alerts of contamination (hours, not days) allows immediate corrective action
- Faster clearance of raw materials and finished products reduces warehousing and refrigerated storage requirements, thereby lowering inventory costs

## Greater confidence and brand value

- Reliable rapid detection improves decision-making and confidence
- Earlier release extends shelf life and product value
- Greater operational efficiency and product quality result in higher profits

## Reduced labour and materials

- Hands-on technical time reduced by as much as 95%
- Media storage and preparation eliminated
- Protocols simplified
- Automatic reports eliminate transcription and related human errors



“ Operation efficiencies, ease of use and Neogen’s service set Soleris apart. ”

Mike Bulk  
Director of quality assurance, Fairview Mills

# Simple protocol, easy workflow



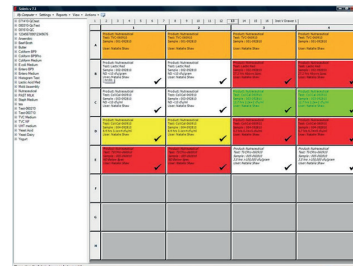
Inoculate ready-to-use vial



Place the vial into the Soleris incubator



Record sample identification into the computer



User-friendly Soleris software is LIMS configurable and 21 CFR compliant

# What can Soleris do for you?

Imagine what you could do if you could find problems hours earlier than traditional testing methods. Recalls can be avoided along with wasted time, money and materials.

Juice production	Time the problem was detected	Litres lost	Cost per litre	Total cost
Soleris	6 hours of manufacturing time	100,000	£1.00	£100,000
Traditional method	24 hours of manufacturing time	400,000	£1.00	£400,000



*That's 300,000 litres saved using Soleris.*



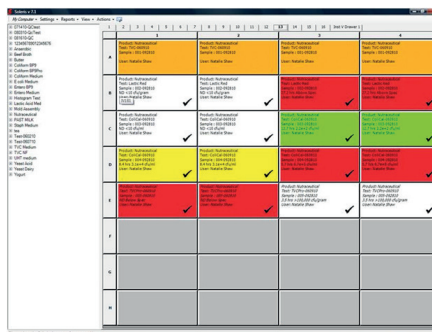


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### Easy to use software:

All systems come with Soleris version 7 software:

- Windows 7 compatible
- Cleaner, intuitive layout
- Administrative control over user access, making the system 21 CFR compliant
- LIMS configurable



### Instruments

Item No.	Product
BSX32	Soleris 32
BSX128	Soleris 128

Supplements and confirmation kits to support the Soleris range are also available, please see your Neogen Europe Technical Representative for more details.

### Approvals

<b>E.coli Medium</b>	(5 mL) AOAC-RI 101101
<b>Direct Yeast and Mould</b>	(9 mL) AOAC-RI 051301
<b>NF-TVC</b>	(9 mL) AOAC-RI 071203
<b>Coliform</b>	(5 mL/9 mL) AOAC-RI 010302

### Vials

Item No.	Product	Quantity
CC – 102	Coliform Medium (5 mL)	100 vials
CC – 109	Coliform Medium (9 mL)	100 vials
DYM – 109	Direct Yeast and Mould (9 mL)	100 vials
EB – 105	Enterobacteriaceae Medium (5 mL)	100 vials
EB – BP9	Enterobacteriaceae Buffered (9 mL)	100 vials
EC – 104	E. Coli Medium (5 mL)	100 vials
LB – 1111	Lactic Acid (Red - 5 mL)	100 vials
LB – 1112	Lactic Acid (Green - 5 mL)	100 vials
NB – 100	Total Viable Count TVC (9 mL)	100 vials
NF – 105	UHT (5 mL)	100 vials
NF – TVC	TVC (9 mL)	100 vials
NF – OSB	Orange Serum Broth (9 mL)	100 vials
SM – 118	Staphylococcus spp. Medium (9 mL)	100 vials
VIV – 107	Osmophilic Yeast (1 mL)	100 vials
DLA – 109	Direct Lactic Acid (9 mL)	100 vials
YCA – 106A	Yeast Acid Food Medium (9 mL)	100 vials
ACB – 109	Direct Alicyclobacillus (9 mL)	100 vials
PD – 109	Direct Pseudomonas (9 mL)	100 vials