

Start

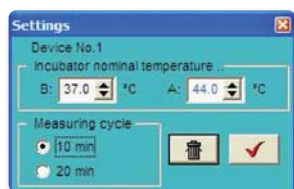


XplOrer64™ System

- Switch-on respectively the uninterruptible power source (UPS), then computer (printer if necessary) and finally the XplOrer64™ System

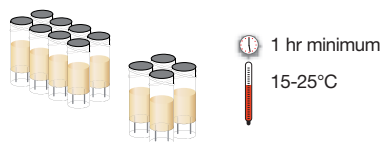


XplOrer64_Manager.exe.Ink

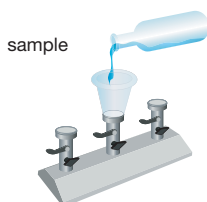


- Start the **XplOrer64 Manager** software by clicking on its icon
- Menu **Start, Start focused instrument**
- Set the temperature of incubator(s) at **44°C** and the measuring cycle on **10 minutes**
NB: Incubator A (top) will be preferentially used if Enterococci analyses are performed in parallel
- **Warm-up the incubator(s) defined for 30 minutes**

Routine Sample Preparation



- Prepare the necessary CheckN'Safe™ tests into a rack and keep them **at ambient temperature at least 1 hr before use**



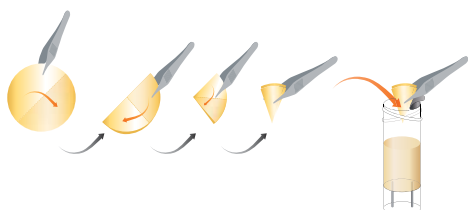
sample

- Prepare the necessary sterile caps and open the seals of CheckN'Safe
- Place a membrane filter composed of cellulose esters, diameter Ø 55 mm, nominal pore of 0.45 µm, on a membrane filters apparatus
- **Filter 100 ml of sample**



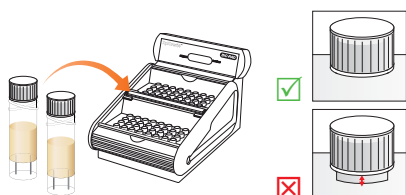
distilled water

- Rinsing by **filtration of 50-100 ml of sterile deionised or distilled water**



- Using sterile tweezers, fold twice the membrane in a cone shape and inoculate it **tip downside** into the CheckN'Safe test
NB: The entire membrane has to be immersed inside the culture medium broth. If necessary, rock the vial gently avoiding the formation of foam
- Add a sterile cap on each CheckN'Safe test

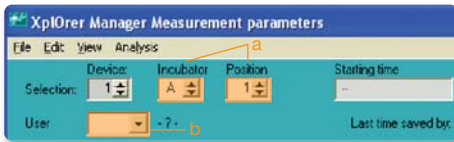
Sample Insertion



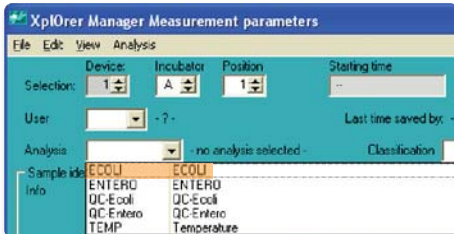
- Place CheckN'Safe *E.coli* into incubator(s) warm-up at **44°C**
- Verify that each CheckN'Safe test is correctly inserted
- Warming-up of tests inserted start **for 1 hr**

Please read the instruction manual for complete and detailed instructions.

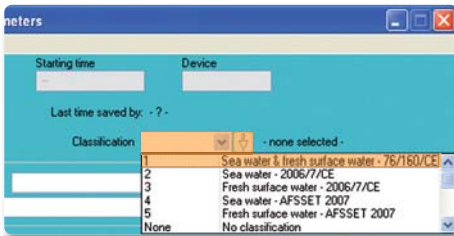
Measurement Parameters



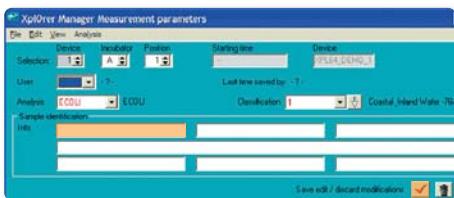
- In the main window **XpIOrer64 Manager Measurement Parameters**, select the option **View** and **Parameters**:
 - Select an **Incubator** to parameter and the position **1**
 - Select an **User**



- Select the **ECOLI** analysis (QC ECOLI calibration is dedicated for the internal monitoring of the culture medium performances)



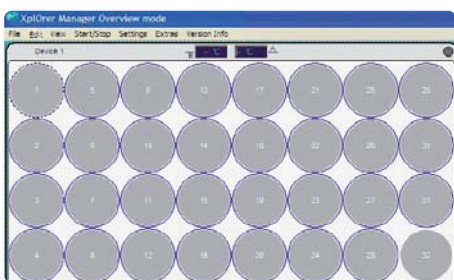
- Select a **Classification** for the results interpretation, according to the origin of the water sample and the directive to follow
- Confirm rapidly these settings by clicking on the **↓** button



- Fill up at minimum the **INFO1** identification field. This step could be performed later at once for all samples, within the **Edit table** function of the **Edit** menu
- Confirm these settings by clicking on the button
- Close this window and confirm by **Yes**



- To set a complete incubator: in the window **XpIOrer64 Manager Measurement Parameters**, click **into** the Spot 1 with the mouse
- In the menu, select **Edit** and **Copy position parameter**



- Press **simultaneously shift button** on the keyboard and **click into the Spot 31**
(NB: spot 32 will be dedicated to the CheckN'Safe Temperature Control cell)
- Edit** and **Insert all parameters**
- Edit** and **Clear copy/paste buffer** to clear the buffer. Settings are therefore registered

Results Reading



Warming-up



Analysis on going

- From the end of the warming-up, samples are analyzed in continue each 10 minutes, for 8 hrs

Approximative Detection Time:

<i>E. coli</i> /100 ml	Detection time
< 41	≥ 8.00 hr
100	6.30 hr = 6 hr 18 min
250	5.55 hr = 5 hr 33 min
500	5.09 hr = 5 hr 05 min
1,000	4.69 hr = 4 hr 42 min
1,800	4.39 hr = 4 hr 23 min
2,000	4.34 hr = 4 hr 20 min
Maximum: 1.59.10 ⁹	0.1 hr = 6 min

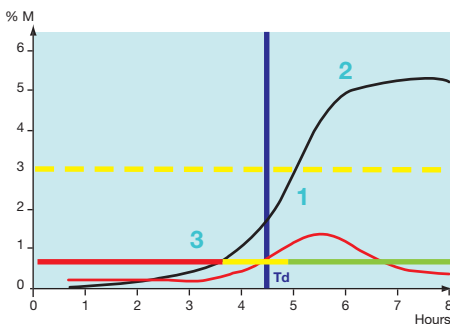
- Real-time analysis moving forward can be followed at any times by simple observation of the spots:

CheckN'Safe™ <i>E. coli</i> analysis (in germs/100 ml)					
Spot appearance in XplOrer64 Manager	in real time...				
	at the end of analysis				
Interpretation	Water quality	Polluted water	Suspicious pollution	Good quality	Excellent quality
	<i>E. coli</i> /100 ml	≥ Imperative value]Imperative value; guidance value[≤ Guidance value	< Detection limit
76/160/CEE Directive	Coastal and inland water	≥ 2,000	[100-2,000[< 100	< 41
2006/7/CE Directive	Coastal (sea water)	< 500	[250-500[< 250	< 41
	Inland water	≥ 1,000	[500-1,000[< 500	< 41
AFSSET 2007	Coastal (sea water)	≥ 1,000	-	< 1,000	< 41
	Inland water	≥ 1,800	-	< 1,800	< 41



- At the end of the cycle of analysis **and in all cases before discarding the analyzed tests**, finalize the samples identifications with the **Edit table** function of the **Edit** menu

Positive Signal Confirmation



Rules to confirm a positive signal:

- The typical profil of the original impedance curve is a sigmoid curve, reaching the 3% threshold during the analysis
- This original curve has not to decrease before to reach the "stationnary" phase
- If the Td is determined within the 3 first hours of the cycle, the original curve has to reach its 3% threshold (discontinued yellow line) within 5 hrs.** In this case, the software will automatically delete the measured points before these 3 hrs, and the result will be considered as negative

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