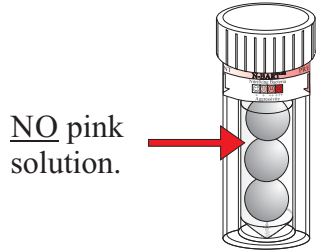


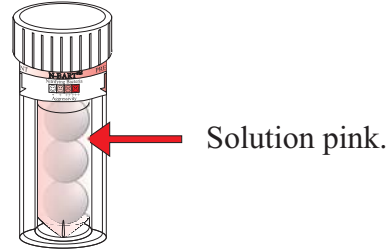
# BART™ TEST FOR N NITRIFYING BACTERIA

Present/Absent - observe at day 5.

ABSENT  
(Negative - Non-aggressive)

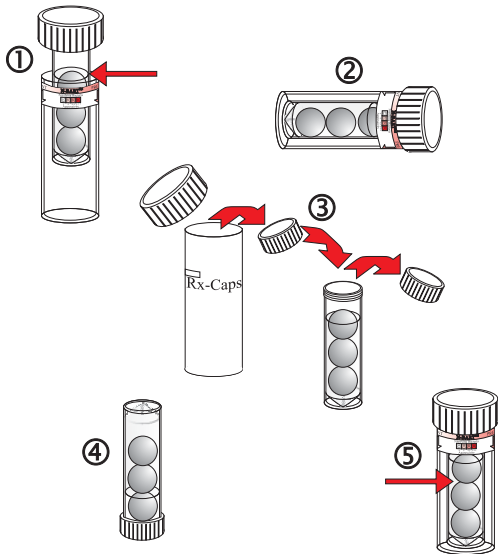


PRESENT  
(Positive - Aggressive)



\*Note: Refer to page bottom for approximate population

## N-BART Instructions.



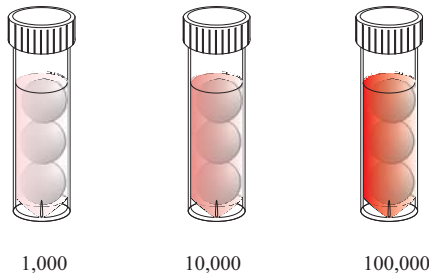
1. Remove inner vial and add water sample to fill line.

2. Replace inner vial and place on side for 5 days.

3. On day 5 of test remove the inner test vial from the outer and replace cap with cap from Rx tube.

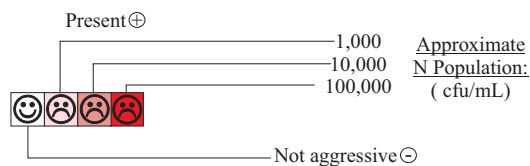
4. Invert tube for 3 minutes and return upright to outer tube.

5. After 3 hours observe for pink color change.



Approximate N Population:( cfu/mL)

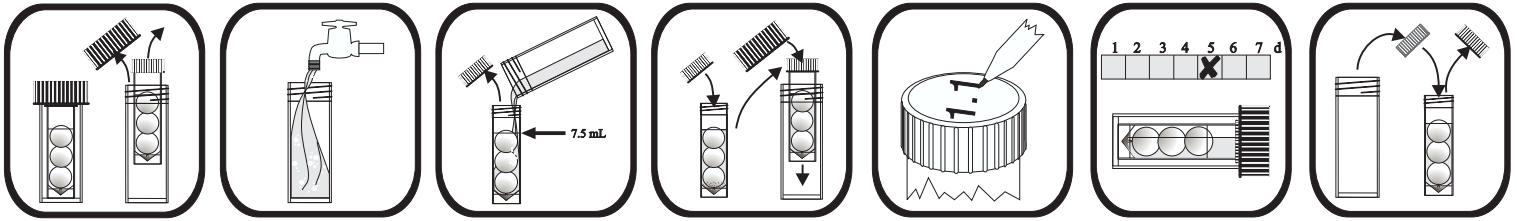
Determination of Potential N Population - observe daily for reaction.



# N-BART™

Nitrifying bacteria recycle organic nitrogenous materials from ammonium (the endpoint for the decomposition of proteins) to nitrates. In water, aggressive nitrifiers can produce high concentrations of nitrates.

Nitrates in water can be a potential health risk, particularly to infants who have not yet developed a tolerance to nitrates. Aggressive nitrifying bacteria in waters may indicate the latter stages of aerobic degradation of nitrogen-rich organic matter. This can indicate that the water may have been polluted by nitrogen-rich organics from sources such as compromised septic tanks, sewage systems, industrial and hazardous waste sites and is undergoing an aerobic form of degradation.



1. Remove the inner tube from the outer tube.

2. Using the outer tube from the BART, or a different sterile container, collect at least 20 mL of sample.  
**Note:** Do not touch or contaminate the inside of the tube or lid. Use aseptic technique.

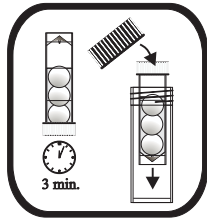
3. Fill the inner tube with sample until the level reaches the fill line.  
**Note:** After removing the cap from the inner tube, set it down directly on a clean surface. To avoid contamination, do not invert the cap.

4. Tightly screw the cap back on the inner tube. Return the inner tube to the outer tube and screw the outer cap on tightly. Allow the ball to rise at its own speed. DO NOT SHAKE OR SWIRL THE TUBE.

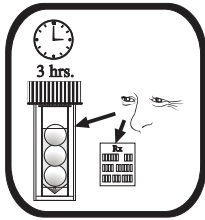
5. Label the outer tube with the date and sample origin.

6. Place the BART tube on its side away from direct sunlight for five days at room temperature (21 to 25°C).

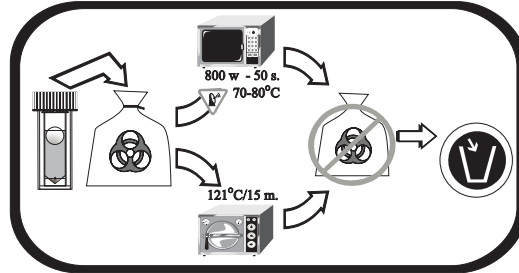
7. After five days, return the tube to a vertical position. Remove the white cap from the inner tube and replace with a Reactor Cap from the white supply tube. Screw the Reactor Cap on tightly.



8. Invert tube for three minutes to allow the reagents in the Reactor Cap to mix with the solution. Return tube to a vertical position and replace to outer tube.



9. Let tube rest for 3 hours. Read the reaction. Compare the observed reactions on the Reaction Comparator Chart.



10. Safely dispose using a dedicated microwave oven or by autoclave.

## Certificate of Analysis

This certificate confirms that the BART™ product listed by name, lot number, and batch number has been subjected to the full range of Quality Control procedures as outlined in "User Quality Control Manual in support of the BART Biodetection Technologies" published in 2004 by Droycon Bioconcepts Inc.

BART™ Type: N-BART

Batch #:

Release date\*:

Lot#:

Shipment date:

Expiry date:

\* Approval for release includes the following criteria: 1. confirmation of sterility for the vials and caps, 2. approval of the medium as being appropriately formed and acceptable, 3. is sterile, and 4. responds in a typical way to inoculation and incubation using selected defined microbial cultures. Details of these criteria are included in our Web Site.

This certificate confirms that the batch of the BART™ biodetectors listed have satisfactorily passed the QC screening procedures and were approved for release on the date given above

*Certificate Number:*

This certificate was issued by Droycon Bioconcepts Inc., 315 Dewdney Ave., Regina, SK., Canada, S4N 0E7 as an assurance that the product listed above has passed through the quality control procedures considered essential to the successful use of the testing device.