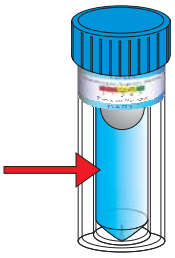
BART™ TEST FOR HAB HETEROTROPHIC AEROBIC BACTERIA

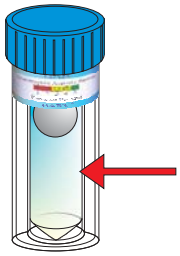
Present/Absent - observe daily for 4 days.

ABSENT
(Negative - Non-aggressive)



The solution is Blue.

PRESENT
(Positive - Aggressive)



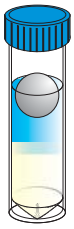
Bleaching of blue.

1. View test each day for 4 days.
2. Observe any color changes.
3. Compare with descriptions.

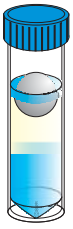
*Note: Refer to page bottom for approximate population

Advanced test information.

Determination of Dominant Bacteria



Blue Bleaching Up from Bottom **(UP)** - Aerobic Bacteria.



Blue Bleaching Down from Top **(DO)** - Anaerobic.

Determination of Potential HAB Population - observe daily for reaction.

Days to reaction - Approximate HAB Population (cfu/mL)

Aggressive	Moderate	Not Aggressive
1 - 5,400,000	3 - 61,000	5 - 700
2 - 575,000	4 - 6500	6 - <75

Made in Canada

*SAMPLING NOTE - For samples of 4% saline or greater (40,000 ppm) may cause blue effect to not occur when tube is inverted. For these higher salinity levels add only 14 mL of sample to the tube followed by adding 1 mL of sterile distilled water to the inner cap to dissolve the blue die. Pour cap volume to the inner tube. For detail instructions, visit:
http://www.dbi.ca/BARTs/PDF/DBHSSOPO5 HAB-BART tests In Brackish and Saline waters.pdf

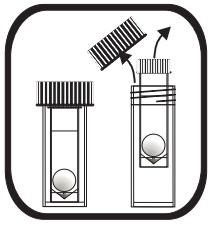
HAB-BART™

For water and wastewater

Often you need to test water for the presence of bacteria without trying to determine the particular groups of bacteria that may be present. When total aerobic bacteria are present and active, the blue dye in the BART bleaches either from the bottom up or the top down.

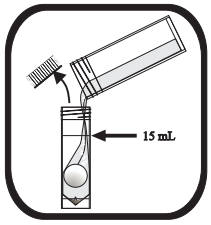
The test measures the ability of the total aerobic bacteria to respire while degrading the selected combination of chemicals in the tester. Methylene blue, the dye, acts as an alternative to oxygen for microbial respiration. When the microbes respire, the methylene blue changes to a colorless form. The faster the dye is bleached, the greater the level of respiration and the larger or more aggressive the total aerobic bacteria population.

Aerobic bacteria can cause several problems in water, including slime formations, turbidity, taste and odor, corrosion, health risks, and hygiene risks. When a problem is detected, you may want to conduct more testing to determine precisely the nature of the microbial problem. You can use other BARTs to detect several types of bacteria.

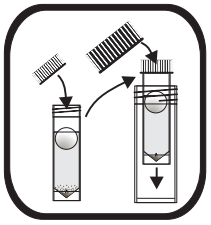


1. Remove the inner tube from the outer tube.

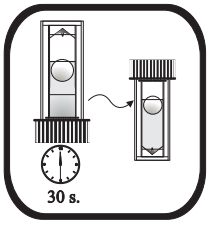
2. Using the outer tube from the BART, or a different sterile container, collect at least 20 mL of sample.
Note: *Do not touch or contaminate the inside of the tube or lid. Use aseptic technique.*



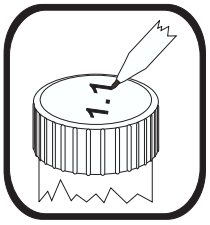
3. Fill the inner tube with sample until the level reaches the fill line.
Note: *After removing the cap from the inner tube, set it down directly on a* ***clean surface****. To avoid contamination, do not invert the cap.*



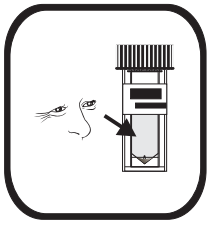
4. Tightly screw the cap back on the inner tube. Return the inner tube to the outer tube and screw the outer cap on tightly. Allow the ball to rise at its own speed.
DO NOT SHAKE OR SWIRL THE TUBE.



5. Invert tube for 30 seconds to dissolve the dye under the cap. Set tube upright to allow dissolving.

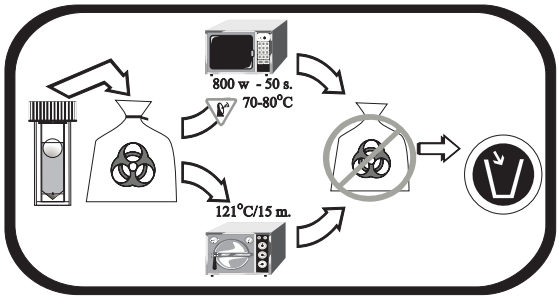


6. Label the outer tube with the date and sample origin.



7. Place the BART tube away from direct sunlight and allow to incubate at room temperature. Check the BART visually for reaction daily.

***SAMPLING NOTE - For samples of 4% saline or greater (40,000 ppm) may cause blue effect to not occur when tube is inverted. For these higher salinity levels add only 14 mL of sample to the tube followed by adding 1 mL of sterile distilled water to the inner cap to disolve the blue die. Pour cap volume to the inner tube.**



8. 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: HAB-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.

DBI ISO 9001:2000 Compliant

For more information, visit our web-site at:
http://www.DBI.ca