

Bio Testing Tools

Sulfate & Total Bacteria

(Not e.coli, not coliforms, not SRB, just total bacteria)

Requires dip slides, incubator, 24 hours and an accurate sample of water in the proper bottle (not Gatorade bottle).

Incubator



Happybuy 23L Reptile Incubator ReptiPro 6000 Reptile Egg Incubator Hatching Portable Reptile Incubator Heats and Cools Work for Small Reptiles (Reptile Incubator)

https://www.amazon.com/Happybuy-Incubator-ReptiPro-Hatching-Portable/d/B072MM8DZN?ref=bl_dp_s_web_18202051011

Specification

- Operating voltage: 12 volts DC 110 volts AC household or car design
- AC (household): One end of the power cord is connected to the device and the other end is connected to an electrical outlet
- DC (Car): One end of the vehicle-mounted line is connected to the equipment and the other end is connected to the cigarette lighter port of the automobile
- Internal specification: D23.9 x L27 x H37cm (9.4"x10.6"x14.6")
- External specification: D41.7 x L34 x H47.7cm (16.4"x13.4"x18.8")

Sampling

1. 16 fl. ounce water bottle. Rinse thoroughly with water being sampled. Rinse neck of cap to remove any bacteria that may have been left behind drinking the water.
 - a. **9/3/2019 – Do NOT use Gatorade bottles – they leave a residual that can hinder testing results.**
2. Sample must be a fresh run of the water.
 - a. Avoid sample from a stagnant water source.
 - b. Avoid a sample from water that is treated, unless this is your intention and if so be sure to label as such. 2.
 - c. Take pond samples from 6 inches or more below the surface.
 - d. Take water from inlets versus end of runs.
 - e. You may wish to take multiple samples; source, post filters, end of line.
3. Secure bottle cap with electrical tape.
4. Label the bottle – source and date taken
5. In summer conditions where temperatures are 100 deg. F or more, package bottle(s) with an ice pack to keep cool, but not to freeze. CAUTION – shippers will destroy leaking packages.
6. Please include your contact information and a message in the box.
7. If you want to include your soil and water analyses, email them please so we may retain them on file.
8. Best to ship next day or two-day delivery
9. Send sample to:

HCT Bac T
C/) 7032 East Cortez Drive
Scottsdale, AZ 85254-5123

10. Expectations: 1-2 days incubation after receipt. HCT will email results. If soil and water reports are also provided, interpretations will be emailed in about 4 days.
11. Technical assistance – email info@hctllc.com or call. Normally responses are same day.

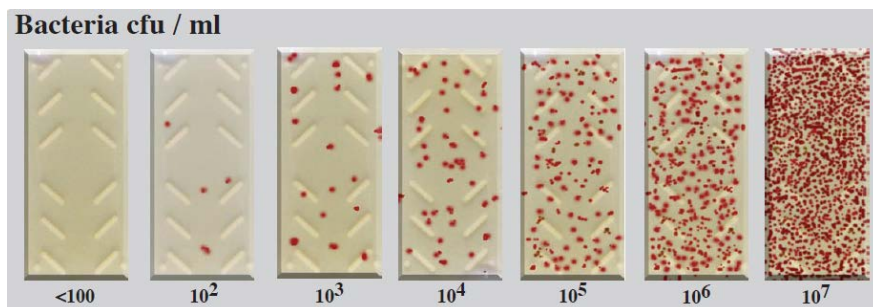
Total Bac T Operations

Preparation / Insertion

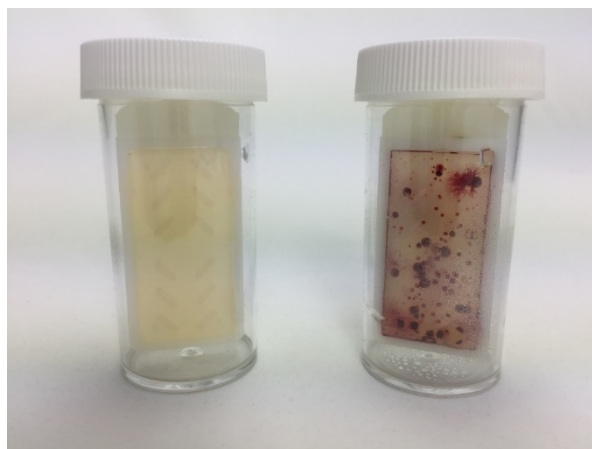
1. Advise client receipt of sample
2. Unscrew the cap on the DipSlide – be careful to not touch the paddles surfaces
3. Apply water to DipSlide
4. Allow to soak 2-3 seconds on each side of paddle
5. Allow excess water to drain from the paddle
6. Label the lid with number, date and time
7. Place paddle into container
8. Set into Incubator upright
9. Assure incubator temperature is set at 25-30 deg C
10. Document the Paddle
11. Schedule removal date and time
12. Incubate culture 24-48 hours

Removal / Documentation

13. Remove DipSlide
14. Compare to Chart
15. Document the exponent observed
16. Complete Report / findings
17. Advise client of results



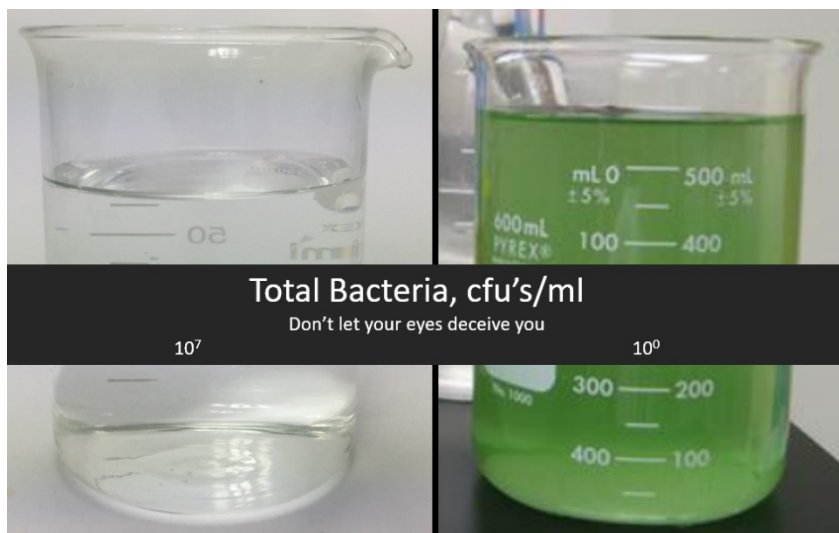
Example;



Exponents:

Number	Power of	CFU's/mL
10	2	100
10	3	1,000
10	4	10,000
10	5	100,000
10	6	1,000,000
10	7	10,000,000
10	8	100,000,000
10	9	1,000,000,000
10	10	10,000,000,000

Note: Don't let your eye deceive you. The clear water has 10,000,000 CFU's/ml – The green water has none. The clear water quality with sulfur and sulfate was causing rose plugs to die.



Bac T Test Kits (dip slide)



- About \$4.50 each, plus freight
- 90 days shelf life
- 7 days delivery



1950 Tobsal Court ■ Warren, MI 48091-1351 USA
Phone: 586.755.8970 ■ Toll Free: 800.253.6800 ■ Fax: 586.755.8978
www.biosan.com

Sani-Check B Dipslides (10 tests/kit)

Product #210

The Sani-Check B dipslide makes the determination of bacterial counts fast and simple. Both sides of the dipslide are coated with a medium selective for bacteria. Aerobic bacteria will grow on this medium and their growth will be in the form of red dots, also known as colonies, on the surface of the agar. The dipslide is compared to a chart in order to get a quantitative interpretation of the results.

Sani-Check B Test Kit: Dipslide for Detecting Bacteria

Contamination by bacteria in aqueous industrial environments can be responsible for failures in productivity resulting in economic loss. This is particularly true in metalworking fluids and stored hydrocarbon fuels, but the problem also exists in other industrial process and cooling waters.

Growth by bacteria in these systems can be responsible for corrosion, slime formation, foul odors, and decreases in fluid function. In order to effectively treat contamination with biocide, levels of bacterial growth must be routinely monitored. The Sani-Check B dipslide makes determination of these microbial counts fast and easy. Sani-Check B Test Kits contain dipslides coated with an agar culture medium. Each test kit is complete and ready to use. No special equipment or training is necessary.

Both sides of the dipslide are coated with a medium selective for bacteria. Almost all aerobic bacteria will grow on this medium and their growth will be in the form of red dots, also known as colonies, on the surface of the agar. The dipslide is compared to a chart in order to get a quantitative interpretation of the results.

The Sani-Check B Test Kit has a six-month shelf life. It can be stored in the refrigerator or at room temperature, but care should be taken to avoid frequent temperature changes.

Sulfate Test Kit

https://www.thomassci.com/Laboratory-Supplies/Water-Quality-Test-Kits/_/SULFATE-TEST-KIT?q=Sulfate%20Test%20Kit

WaterSOLV™ BC Treatment Formula



If Sulfur >40 ppm, or Sulfate >120 ppm, then Total Bacteria Exponent times 0.25 = Water Treatment ppm WaterSOLV™ BC.

HCT, LLC
7032 East Cortez Drive
Scottsdale, AZ 85254
(888) 788-5807 – info@hctllc.com | www.hctllc.com



Sustainable Chemistry & Biology for Agronomy

Well-Klean®, WaterSOLV™ and Water Treatment for Agronomy™ are trade names of HCT, LLC