732-249-0990 *phone*
732-249-0905 *fax*
info@towerwater.com
5 Shirley Avenue
Somerset, NJ 08873
towerwater.com

TOWER WATER

Water Treatment Bacteria Testing Procedure

- **Testing**
  - **Collect Bacteria sample**
    - **Done once a week**
    - **Do not touch culture strip**
    - **Collect running water directly in bacteria bottle**
    - **Place bacteria strip in bottle**
    - **Remove bacteria strip from bottle**
    - **Empty bottle and place bacteria strip in bottle**
    - **Read bacteria level 3 days later**

REV2 9-14

SOLAR-CULT® DIP SLIDE (MC-600)

DIRECTIONS

1. Unscrew the cap and withdraw the cap and slide from the vial. Be careful not to touch the agar coated surface of the slide.
2. Dip the slide into the fluid to be tested, covering the agar surface for a minimum of three seconds before removing.
3. Allow the excess fluid to drain from the slide. Remove the remaining drops by touching the end of the slide to sterile absorbent material.
4. Screw the cap back on lightly and then back it off one half turn. Incubate the vial in an upright position at 25-34°C (77.0-95.0 degrees F.) The slide should be examined in the plastic vial for growth 24 hours after commencement of incubation and after a total of 48 hours for bacterial growth. If the SOLAR-CULT® unit is being used the fungal side should be examined after 48 hours and daily thereafter up to a total of five days of growth.

INTERPRETATION OF RESULTS

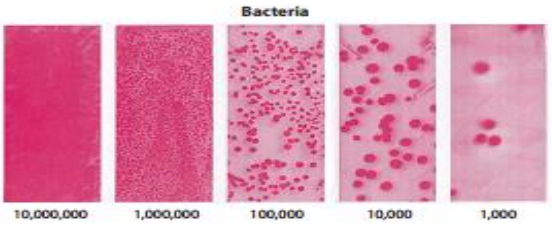
A. Bacteria (Transparent side)
Bacteria grow as red or colorless colonies. To determine number of bacteria, compare the colony density on the transparent side with the colony density on the bacterial chart. Colorless colonies should be included in the comparisons. It is the number of colonies, not the size of colonies that is important.
Microbial counts in excess of 10^7 may appear as a uniform pink or red layer. To obtain an accurate count on such samples dilution is required.

SAMPLE DILUTION INSTRUCTIONS
A sample may be diluted by adding 1ml to 99ml of boiled cooled tap water in a clean container. Add 1ml of the test sample to the diluent, cap the container and shake vigorously. Then dip the slide into the diluted sample and proceed as above. Take the dilution factor into account when estimating growth. For example, a 10^5 count from a 1/100 dilution of fluid would indicate 10^7 organisms per ml in original sample.

B. Fungi and Yeasts (Brown side)
The brown side will detect the presence of yeasts and/or fungi. Yeasts grow as smooth, round colonies and fungi as fuzzy colonies. Growth on this side may consist of pure yeast or fungi or a mixture of both. Growth and type should be recorded when first seen, but incubation should be continued for 4 to 5 days to obtain good evaluation of possible fungal contamination.

To estimate yeast levels compare yeast growth on fungal side to yeast colony density chart. Any fungal growth in excess of one or two colonies per slide requires corrective action.

COLONY DENSITY CHARTS (per ml)



Last Revised: 3/21/13