

## **USER GUIDE**

# Dipslide AB-T Aerobic Bacteria - (TTC)

### **Product Description**

The TTC dipslide was first used to solve various physical, chemical and microbial changes in samples during the process of media transportation. Because of its portability, cost-effectiveness, and its ability to maintain various sample properties, it is widely used for detecting various fluids.

Bacterial count is significant in providing information about the degree of bacterial contamination. In industries such as drinking water, cooling water, pools, pharmaceuticals, and hospital, the monitoring of the total number of bacteria is necessary to ensure product safety and hygiene. In addition, bacteria count are one of the important indicators used to evaluate the status of water pollution.

Pyxis Dipslide AB-T is used to semi-quantitatively test the total number of aerobic microorganisms. It helps users discover and solve microbial contamination problems in time, in order to maintain system efficiency and relevant quality requirements. The Pyxis AB-T is the a comprehensive dipslide and may be widely used in several industries.



## **Features**

- 10<sup>2</sup>-10<sup>7</sup>CFU/mL Aerobic Bacteria Detection Range
- Quick & Easy Operation: Ready-To-Use
- Store in a COOL and DRY Place Away from Light: No Refrigeration Required
- Double-Sided Agar Plates test different Types of Micro-organisms Simultaneously
- Parallel Experiments can also be Conducted (When the Double-Sided Culture Medium is Consistent)
- Quick Results which can be Obtained within 1-2 days
- Vast Application Scenarios: Can be used for Detecting Liquids, Object Surfaces (Clothing, Hands, Countertops, etc.)
- The Unique Elastic Support Rod Design provides a Softer Grip

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## Liquid Usage Method

- *i.* Unscrew the lid counterclockwise & pull out the contact plate (be careful not to touch the agar piece)
- *ii.* Fully immerse both sides of the agar in the liquid for 5 seconds
- *iii.* Then wait for the excess liquid to drip naturally (this process only takes a few seconds)
- *iv.* Place the contact plate back into the sterile tube and tighten the cap clockwise





## Solid Surfaces Usage Method

- *i.* Unscrew the lid counterclockwise & pull out the contact plate (be careful not to touch the agar piece)
- *ii.* Bring both sides of the contact plate into full contact with the surface (the test plate can be bent 180°)
- *iii.* Place the contact plate back into the sterile tube & tighten the cap clockwise

### Incubation

- *i.* After ensuring that the Dipslide tube is tightened, place it vertically in a constant temperature incubator at 25-30°C for 24-48 hours.
- *ii.* If incubated at room temperature, it will take 48-96 hours before the results can be compared.
- *iii.* If the cultivation temperature is lower than room temperature, it is recommended to extend the experiment for another 24 or 48 hours before comparing the experimental results.





## Comparison of AB-T (Aerobic Bacteria - TTC) results



- Colorless colonies should also be counted;
- The unit of test results is CFU/ml Each ml contains the total number of bacteria community;
- **Result A:** There are traces of microbial pollutants in the water quality, but the impact on industrial water is small and usually doesn't create problems;
- **Result B and C:** The water quality shows limited signs of initial pollution by microorganisms. There may be some harmful substances, but it can still adapt to most of the industrial water treatment processes;
- **Result D:** The water quality is significantly contaminated by microorganisms, with high concentrations of harmful substances that pose potential risks to industrial water use, and may require additional treatment measures or specific operations to reduce water use;
- **Result E:** The water quality is heavily polluted by microorganisms, and the concentration of harmful substances is very high, posing a significant threat to industrial water use. Urgent measures may need to be taken to ensure safe water quality and the smooth production process;
- **Result F:** The water quality has reached an extremely poor state, with extremely high levels of microbial pollution, causing serious harm to industrial water use. It may be necessary to stop using the water source and carry out comprehensive cleaning and restoration work.

#### Precautions for Storage & Use

- Dipslide AB-T has a shelf-life of 6 months. If colonies have grown on the slide prior to testing, please discard immediately.
- Direct sunlight & high temperatures can cause agar water loss & indicator failure. Please store this product in a cool and dry place, with an optimal storage temperature of 12-25°.
- Dipslide AB-T must be kept sealed before use, and must be used immediately after unscrewed and cannot be reused.
- The changes in temperature and humidity during storage can cause sterile condensed water to be generated in the bacterial test tube, which has no impact on the result itself.
- During the process of microbial reproduction, adverse odors may appear. It is recommended to wear relevant protective equipment before opening the cover for observation.
- After use, the test strips should be disposed in accordance with local regulations. They can be sterilized by high temperature, high pressure, damp heat and soaked in disinfectant overnight before disposing it into the waste bin.

# FAQs for AB-T Total Bacterial Test Sheets

#### Why is it necessary to test the total number of colonies or microorganisms?

Detecting the total number of microorganisms or colonies is one of the ways to ensure product quality and safety. It allows us to control biological pollution, comply with regulatory standards, ensure environmental health and safety, and conduct scientific monitoring and research. Through regular testing, potential problems can be detected early and appropriate measures can be taken to ensure the smooth progression of the production process, while protecting people's health and environmental safety.

#### The manual states that a constant temperature incubator is required, but is it necessary?

To obtain the most accurate data, we recommend using a constant temperature incubator. If conditions are limited, room temperature cultivation can also be carried out. However, it should be noted that temperature difference between day and night during room temperature cultivation can have a certain impact on the final results. At the same time, it is necessary to avoid light during the cultivation process to avoid excessive dehydration indicator failure.

### *Is there any assisted identification software for identifying results of different concentrations?*

The uPyxis 2.0 incorporates the Dipslide result analysis program. This program utilizes advanced image processing technology to quickly analyze and identify microorganisms on the Dipslide within seconds, saving time and human resources. Through highly accurate algorithms and models, our software can accurately calculate the total number of microorganisms and provide reliable detection results for you to make timely decisions.

#### How many specifications are there for bacterial test tablets? Is the counting method the same as the plate counting method?

The Pyxis Dipslide AB-T is available in a 12 pack. Its calculation method is characteristically different as compared to the plate calculation method, with the main difference being the different sampling volume. There are no strict requirements on the experimental environment for these bacterial testing sheets, and they can be used directly in the field. Users only need to follow the steps in this document. However, the detection limit of the plate count method is 30-300CFU/ml, while the dipslide is <100CFU/ml, making the plate calculation method more accurate.

Product	P/N	
Pyxis Lab® Dipslide AB-T Bacterial Test Kit (12 Pack)	39701	

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