Dipslide SA-C (Staphylococcus Aureus-Chromogenic) Product manual

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 including industrial and cooling water systems.

Staphylococcus aureus is a type of Gram-positive bacterium that can rapidly proliferate in suitable environments, producing toxins that may lead to serious health issues, including food poisoning and skin infections. In the case of water supply systems, contamination by Staphylococcus aureus can threaten the biological safety of drinking water. Regular testing not only helps in early identification of potential sources of contamination but also enables water facilities to take timely measures, such as increasing disinfectant usage or replacing contaminated pipelines, to prevent further spread of Staphylococcus aureus.

Our Dipslide SA-C is primarily designed for the rapid and efficient testing of Staphylococcus aureus. By conducting regular testing for Staphylococcus aureus, you can promptly identify potential sources of contamination and implement appropriate control measures to ensure the biological safety of water supply systems. It is widely used in rapid water quality testing, food, cosmetics, and other industries.

Product Features

- **Quick and easy operation. Detection range: 10^2-10^6CFU/ml;**
- **Quick and easy operation, Ready to use**
- Store in a **cool and dry place away from light**, No refrigeration required;
- Double-sided agar plates, **can be used to test different types of microorganisms simultaneously**; parallel experiments can also be conducted (when the double-sided culture medium is consistent)
- Results are quick and can be obtained in only 24-48h;
- **Rich application scenarios**, can be used for detecting liquids, object surfaces (clothing, hands, countertops, etc.);
- The unique elastic support rod design provides a softer grip.

Pyxis

Usage method

For Liquid samples

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

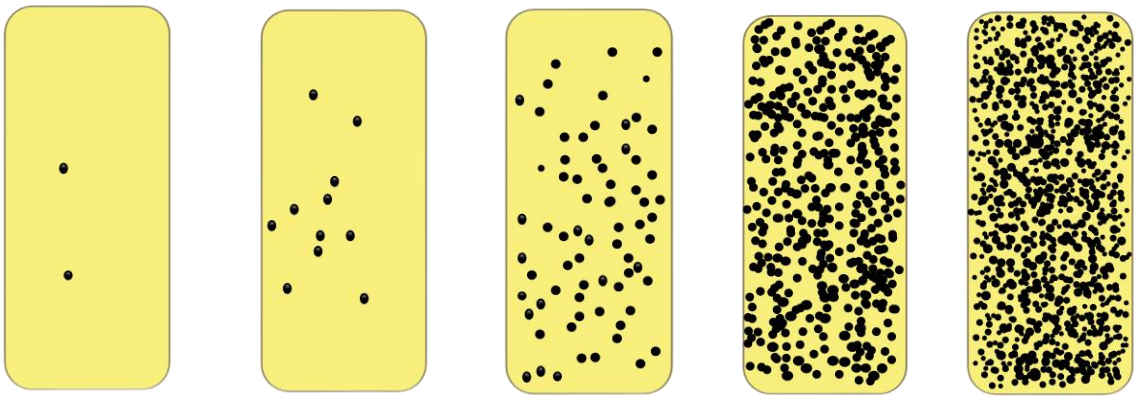
For Solid Surfaces

- Unscrew the lid of Dipslide SA-C counterclockwise and pull out the contact plate (be careful not to touch the agar piece) ;
- Bring both sides of the contact plate into full contact with the surface of the object (the test plate can be bent by about 180 °);
- Place the contact plate back into the sterile tube and tighten the cap clockwise.

Incubation

- Ensure that the Dipslide tube is tightened and placed vertically in a 35℃ constant temperature incubator for 18-24h;
- If it is placed at room temperature, it needs to be compared after 1-2 days
- If the culture temperature is below room temperature, it is recommended to extend the experiment for another 1 or 2 days to compare the experimental results.

Comparison of SA-C (Staphylococcus Aureus-Chromogenic) results



weak pollution A	mild pollution B	mild pollution C	moderate pollution D	severe pollution E

- Staphylococcus aureus: black colonies; Bacillus anthracis: gray or brown colonies;
- 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;

Precautions for storage and use

■Dipslide SA-C has a shelf-life of 6 months. If colonies have grown on the slide prior to testing, please discard immediately.

■ Direct sunlight and high temperatures can cause agar water loss and indicator failure. Please store this product in a cool and dry place, with an optimal storage temperature of 12-25 ℃.

■Dipslide SA-C 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.

FAQ for Dipslide SA-C

1.Why test for Staphylococcus aureus?

Staphylococcus aureus may enter drinking water through contaminated water sources and grow and multiply under certain conditions. Staphylococcus aureus infections can cause gastrointestinal disorders, leading to symptoms such as diarrhea, vomiting and abdominal pain. And Staphylococcus aureus is one of the most common pathogens in food. It can enter the body through contaminated food, such as meat, dairy products, seafood, etc. Certain strains produce toxins, such as heat-resistant enterotoxins, which multiply and accumulate in food and can cause food poisoning if they are ingested. Therefore, testing for Staphylococcus aureus can help ensure the safety of food and reduce the incidence of food poisoning.

2. We are in the field of antimicrobial materials, and I noticed that your EC-C and SA-C can be tested for E. coli and Staphylococcus aureus, so can this be a reference for our antimicrobial efficacy?

Yes, it can be used for reference use. The R-value is 2.0 when the bacterial concentration of the untreated sample is 10^4 CFU/ml and the bacterial concentration of the treated sample is 10^2 CFU/ml.

3. Can SA-C detect other types of bacteria besides Staphylococcus aureus?

Dipslide SA-C can also detect bacteria such as Bacillus subtilis and Proteus, but for Staphylococcus aureus SA-C can be semi-quantitative, while Bacillus subtilis and Proteus can only achieve qualitative results.