



Identifying and counting the number of *salmonella* bacteria in liquids or on surfaces
Used in oil, gas and petrochemical industries, air industries, food industries, water and waste water, pharmaceutical and other industries.

Contamination of food and water can be considered as one of the causes of diseases caused by *salmonella*. Therefore, *Salmonella* detection is of great importance for health and safety issues in industries. For this reason, to prevent the transmission of *salmonella* infection to consumers, industries must ensure that their products are not contaminated with this bacteria. Therefore, rapid detection of *salmonella* can be very important. Chromogen culture media are among the things that make the quick and one-step identification of bacteria possible.

MicrobCheck™ *Salmonella* slides have a specially formulated chromogenic culture medium on both sides of the slide. This test kit is exclusive and the presence of *Salmonella* in the sample is determined by the formation of purple colonies. *E. coli* bacteria are also seen as blue colonies. Other bacteria are either unable to grow in this culture medium or form colorless colonies.

MicrobCheck™ *Salmonella* slides have two different culture media on both sides of the slide and the examination surface with dimensions of 8 square centimeters.

Manufacturer's Recommendation

Avoid contact with the inner wall of the falcon and perform the test under sterile conditions.

After opening the falcon, place the door upside down, with the bottom facing the ground, on a clean surface.

Test Method

Liquid Sampling: After taking out the slide from inside the sterile falcon, dip it into the liquid sample under investigation and wait for ten seconds, then take out the slide and wait for a few seconds until the excess liquid is removed from the surface of the slide. After that, put the slide back inside the falcon and close the falcon door well.

Surface Sampling: Remove the slide from the sterile falcon and examine it in direct contact with the surface. The contact of two surfaces should be in such a way that the agar medium of the slide is completely stretched over the examined surfaces so that the maximum bacterial recovery takes place.

Air Sampling: take the slide out of the sterile falcon and expose it to air for 15 minutes and then put it back inside the falcon.

Incubation: Incubate the slides at 35-37 °C for 24-48 hours.



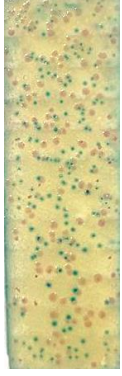
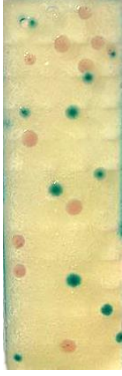




Interpretation of Results

Compare the growth pattern of the bacteria with the reference images. In this test, the number of microorganisms is reported with CFU (Colony Forming Units) per ml. Note that MPN (Most Probable Number) estimates the concentration of bacteria based on the growth in the broth medium.

Sometimes a purple or green-blue color may appear around the slide, which does not affect the counting of colonies and is not calculated.

Total *E. coli* and *Coliforms* count

CFU / ml	10 ⁷	10 ⁶	10 ⁵	10 ⁴	10 ³	10 ²
Reference Images						

Quality Control of the MicrobCheck™ *Salmonella* Test Kit

To confirm the quality and performance of the MicrobCheck™ *Salmonella* test kit, you can culture the specified strains and check the results based on the table below. To perform this test, prepare a diluted suspension of the reference microorganism and immerse the kit slides in it.

Organism (ATCC)	Colony Color
<i>Salmonella enterica</i> (14028)	Magenta
<i>Escherichia coli</i> (25922)	Blue-Green
<i>Staphylococcus aureus</i> (25923)	Inhibition

Best Time to Use

The expiration date of the kits is 6 months and it is necessary to keep them in the refrigerator. It is recommended to avoid frequent temperature changes and freezing. It is possible to see a small amount of moisture in the bottom of the falcon. This has no effect on the performance of the test kit. In case of improper storage, signs of growth, dehydration, or separation of agar from the slide may be observed. In this case, do not use test kits.



Disposal

Test kits are completely contaminated after use and growth of bacteria and yeast. As a result, it is necessary to autoclave them or burn them in a furnace. If this is not possible, open the falcons under the laboratory hood and fill it with bleach liquid with a concentration of 5 to 10%. Let it sit overnight and then throw it away.

