



To identify and count the total number of bacteria and coagulase-positive *staphylococci* in liquids, surfaces, food, and soil.

Used in oil, gas and petrochemical industries, air industries, food industries, water and waste water, pharmaceutical and other industries with special formulations to check different samples such as drinking water, waste water samples, food samples and clinical samples.

MicrobCheck™ TBC / S slides have rich agar medium with special formulation on both sides. Using these slides, counting the total number of aerobic microorganisms in a liquid sample or a surface is easily possible. The TTC present in the culture medium of one side of the slides, by reacting with the enzymes produced in the aerobic respiration of bacteria, causes the color of the colonies to change from white to red, thus making counting easier.

On the other side of these slides, there is a specific agar medium for the growth and isolation of coagulase-positive *staphylococci*, which are characterized by the formation of black colonies.

MicrobCheck™ TBC / S slides have two different culture media on both sides of the slide and an 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 slides at 30-35°C for 24-48 hours.










Interpretation of Results

Compare the growth pattern of the bacteria with the reference images. The number is calculated based on colony forming units (CFU) per ml.







Note that MPN (Most Probable Number) estimates the concentration of bacteria based on the growth in the broth medium.

Sometimes a red or black color may appear around the slide, which does not affect the counting of colonies and is not calculated.

Total Bacterial Count (TBC)

CFU / ml	10^7	10^6	10^5	10^4	10^3	10^2	10^1
Reference Images							

Total Coagulase-Positive *Staphylococci* Count

CFU / ml	$\geq 10^7$	10^6	10^5	10^4	10^3	10^2
Reference Images						



Quality Control of the MicrobCheck™ TBC / S Test Kit

To confirm the quality and performance of the MicrobCheck™ TBC / S kit, the specified strains can be cultured and the results can be checked 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)	TBC Side	Staphylococci Side
<i>Staphylococcus aureus</i> (25923)	Red Colonies	Black Colonies
<i>Escherichia coli</i> (25922)	Red Colonies	Inhibition

Best Time to Use

The expiration date of the kits is 6 months and it is necessary to store them in the refrigerator. It is recommended to avoid frequent temperature changes. Do not store in the freezer. 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. As a result, they need to be autoclaved or burn 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.

