



To identify and total bacteria count in materials and surfaces in various industries such as oil, gas and petrochemical, aviation, food, water and pharmaceutical industries, etc.

MicrobCheck™ TBC 701 slides have rich Agar culture medium with special formulation on both sides. By using these slides, it is possible to count the total number of aerobic microorganisms present in a liquid sample or surface. TTC substrate is used in this kit. This substrate is hydrolyzed under the influence of enzymes produced in aerobic bacteria and is characterized by the color change of the colonies from white to red. Because the agar medium has the same color as the colonies, the use of TTC substrate and color changes of colonies, helps to easily count the colonies. The MicrobCheck™ TBC 701 test kit is a quick and yet simple method for testing medical, food, water and surface samples.

MicrobCheck™ TBC 701 slides have a special agar culture medium for the growth of aerobic bacteria on both sides. The examination surface of the slides is 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 it upside down on a clean surface.

Test Method

Liquid Sampling: After taking out the slide from the sterile falcon, dip it into the liquid to be examined and wait for ten seconds, then take the slide out and wait until it is cleared from the surface of the slide. After that, put the slide back into the Falcon and close the Falcon door well.

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

Air Sampling: Remove the slide from the sterile falcon and expose to air for 15 minutes, then return to the falcon.

Incubation: Warm the falcon containing the slide at 35°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). Note that MPN (Most Probable Number) estimates the concentration of bacteria based on the growth in the broth medium.



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

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

MicrobCheck™ TBC 701 Test Kit Quality Control

To confirm the quality and performance of the MicrobCheck™ TBC 701 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 bacteria and immerse the slides of the kit in it.

Organism	Colony Size (mm)	Morphology	Color	Note
<i>Salmonella enterica</i>	1.5 – 2.5	Convex and shiny	Red	-
<i>Pseudomonas aeruginosa</i>	2 – 2.5	Convex and shiny	Red	-
<i>Streptococcus pyogenes</i>	0.1 - 1	Convex and shiny	Red	-
<i>Escherichia coli</i>	1.5 – 2.5	Convex and shiny	Red	-
<i>Bacillus spp.</i>	2 - 6	Diverse	Red	Possibility of spreadation

Best Time to Use

The expiration date of the kits is 6 months and it is necessary to store them in the refrigerator (4-8°C). It is recommended to avoid frequent temperature changes. Avoid 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, a sign 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 bacterial growth. As a result, they need to be autoclaved 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.

