

Lovibond® Water Testing

Tintometer® Group



D004 TTC/MAC - Coliforms & TVC

Order Code: 56B010410

The TTC/MAC dipslide allows convenient enumeration of aerobic microorganisms (TVC) as well as the cultivation *Enterobacteriaceae* (coliforms). The dipslide is prepared with nutrient TTC agar on one side and MacConkey No3 agar on the other (reddish/ brown). The MacConkey No3 agar selects for bile tolerant gram negative bacteria found in waters and sewage. The additive in the nutrient agar reacts with enzymes produced in aerobic respiration to produce a colour change from white to red, allowing easy enumeration. Gram-positive bacteria will not grow on this media.

SAMPLING Air: The sample should be taken by inverting the paddle and inserting in the vial. Let it sit for 15 minutes exposed to the air, then replace paddle in the vial and seal tightly.

SAMPLING Fluids: The sample should be taken by immersing both sides of the paddle into the fluid to be tested, it having first been removed from the sterile container. Excess sample should be gently shaken from the paddle before it is replaced in the container.

SAMPLING Surfaces: The sample should be taken by allowing direct contact between the agar surface and the test material. The paddle is flexible and can be bent at the upper end to allow both surfaces to come into intimate contact. Bacterial recovery rate is about 50% so that sweeping an area approximately twice that of the paddle will give a more accurate result.

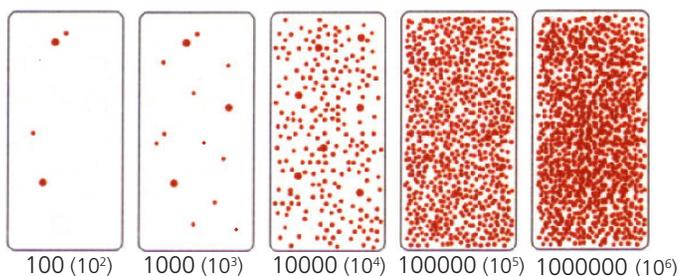
INCUBATION: Incubate at 30°C-35°C for 24-48 hours, when full enumeration should be completed. Alternatively incubate for 18-24 hours at 37°C for enumeration of *Enterobacteriaceae*.

DISPOSAL: Used slides should be incinerated or autoclaved. Alternatively immerse in 10% bleach solution for 24 hours.

Organism	Colony Size (mm)	Shape & Surface	Colour	Comments
<i>E.coli</i>	3.0-4.0	CV.E.G	Red	----
<i>Kleb. aerogenes</i>	4.0-5.0	CV.E.G	Pink / Red	----
<i>Ps. aeruginosa</i>	1.0-1.5	F.CR.D	Yellow / Green	----
<i>Shigella spp.</i>	2.0-3.0	CV.E.G	Pale Yellow	----
<i>Proteus spp.</i>	3.0-4.0	CV.E.G	Pale Yellow	----

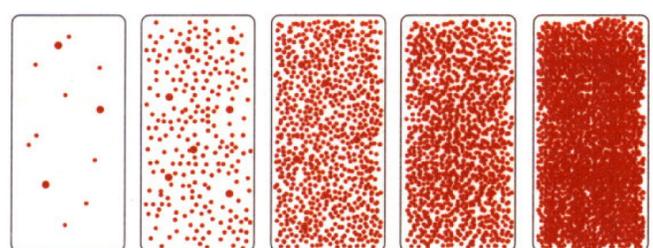
CV.E.G = Convex entirely glossy, FED = Full entire dull, CR = Crenated, D = Dull, F = Flat

AEROBIC MICROBES - TVC



100 (10²) 1000 (10³) 10000 (10⁴) 100000 (10⁵) 1000000 (10⁶)

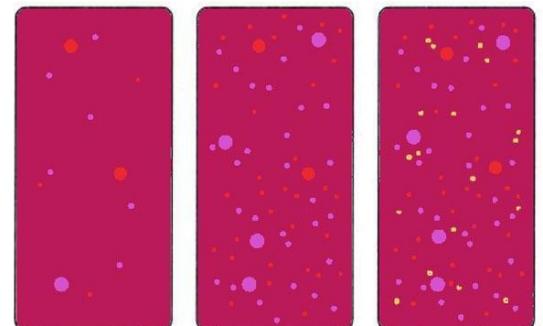
Fluids
Approx Colony Count per ml



Very Light Light Moderate Heavy Very Heavy

Surface

MacConkey No. 3



Light Medium Heavy
(with pseudomonas)

Red / Pink / Red
E.coli, Kleb. Aerogenes
Pale Yellow
Shigella spp., Proteus spp.
Yellow / Green
Ps. aeruginosa