

ICAR-Central Institute of Fisheries Technology

CIDCO Administrative Building, Ground Floor, Sector 1, Vashi,

Navi Mumbai 400 703, Maharashtra

Ph. 022 27826017, Fax: 022 27827413, Email: ciftmum@gmail.com Ready Reckoner/MRC/ 2023/03



Total Plate Count (TPC): ISO Method 4833

225 ml Diluent +25 g Sample (Macerate in stomacher blender)

Diluents

✓ Buffered peptone water (BPW) for fish

&

✓ Peptone salt solution (PSS) for crustaceans and molluscs

01 Sample Preparation

Plate on Plate Count Agar (PCA) pH of PCA: 6.4



10-3

10⁻¹ Dilution

03
Plating
(Pour/Spread)

O2 Sample Dilution 10-1 10-2

Prepare serial dilution of the test sample



Incubation **04**

Incubate @ 30 ± 1°C for 72 ± 3h

Expression of results

✓ Take count from plate containing colonies more than 15 & fewer than 300 ✓ Express the results in CFU/q

Calculation

$$\mathsf{TPC} = \frac{\Sigma C}{V(n1+0.1n2)X d}$$

 Σ C = Sum of all colonies counted on the two dishes retained from two successive dilutions

n1 = No of plates retain in first dilution

n2 = No of plates retain in second dilution

d = Dilution corresponding to the first dilution retained

V = Volume of inoculums placed in each plate in ml.