

Guangdong Detection Center of Microbiology

Analyses and Test Result      Rep.No: 2020FM03476R02

Sample Name: YEARUP    Disinfectant Tablet

Received Date:29-02-2020

Test Items : Field Test of Disinfection

Completion Date: 6-04-2020

### Effectiveness on Disinfect Drinking Water

#### 1.Equipment

1-Test Sample: YEARUP/    Disinfectant Tablet    ,Lot No.2020022401 ,Main Ingredient is  $\text{Co}_2$  10.7%(w/w) .

2-Water Sample : Tap Water

3-Test Strain : Escherichia Coli (8099)    Belongs To 5<sup>th</sup> Generation ,Source: Guangdong Province Microbial Culture Collection Center .

4-Culture Medium :Fuchsin Sodium Sulfite .

5- Neutralizer : 3% Tween 80% ,0.5% Sodium Thiosulfate ,0.5%L Histidine ,0.5%peptone,0.85%Sodium Chloride,1.43%Lechtin ,0.1%PBS Solution of Cysteine

6-Instrument Name and No.: Biochemical Incubator (QFM-B-P017),Electronic Balance JJ500 (QFM-B-P021),Biological Safety Cabinet (QFM-B-P005) .

#### 2.Method:

1- Test Conducted According to Heath Ministry    <Disinfection Technical Standard >,<2002 Edition>-2.1.4.1.8

2-Method Introduction : Prepare 200ml Of Tap Water Each Sample is 100ml ,Add Escherichia Coli Suspension ( $5 \times 10^4$  cfu/100Ml ~ $5 \times 10^5$  cfu/100ml ), One of Them is Positive Set Sample and the other is Test Set Sample . Add Disinfection Tablets To the Test Set ,Make The final  $\text{Co}_2$  Value in the Water is 1mg/L For 15min,Then Add Neutralizer For 10 Min ,Suction Filtration ,Place it on Fuchsin Sodium Sulfite Nutrient Agar Culture Medium Pad , put it in Incubator With Constant Temperature of  $37^\circ\text{C}$  For 24H, Watch The Result and Calculate it. Test Repeat 5Times .

3-Laboratory : Temperature : $22.9^\circ\text{C}$  , Humidity :58%

#### 3.Result :

Test No.	Number of Positive Set Viable Bacteria (cfu/100ml)	Number of Test Set Bacteria (cfu/100ml)
1	$6.80 \times 10^4$	0
2	$5.70 \times 10^4$	0
3	$8.70 \times 10^4$	0
4	$7.50 \times 10^4$	0
5	$6.20 \times 10^4$	0

---

Note : Negative Set :There's No Viable Bacteria.

#### 4. Conclusion:

Experiment Under Conditions ,Sample With ClO<sub>2</sub> Concentration of 1mg/L ,Effective for 15 min, Can Decrease Number of Escherichia Coli Bacteria in Water Up to 0cfu/100ml .