

## TMK 09- H<sub>2</sub>S TEST POWDER KIT

### INTENDED USE

For the detection of *Salmonella* species and *Citrobacter* species from water samples.

### PRODUCT SUMMARY AND EXPLANATION

There is a need for rapid methods to quickly determine the pathogenic bacteria in water other than coliforms. Monitoring microbiological quality of drinking water also needs examination of water samples for presence of bacteria like *Salmonella* and *Citrobacter freundii* using rapid kits. H<sub>2</sub>S TEST POWDER KIT is one such kit used for rapid detection and confirmation of *Salmonella*, *Citrobacter* and *E.coli* from water. It is user-friendly and allows low-cost rapid test. It is also suitable for handling by untrained personnel for monitoring of rural drinking water sources.

### KIT CONTAINS

- Glass vial containing H<sub>2</sub>S test dehydrated powder.

### PRINCIPLE

The kit contains all the essential nutrients for the growth of *Salmonella* and *Citrobacter freundii*. Presumptively, presence of these bacteria is indicated by H<sub>2</sub>S production, resulting in colour change of broth to black from initial light amber colour.

### INSTRUCTION FOR USE

1. Carefully open the bottle cap and fill the water sample up to the mark indicated.
2. Add H<sub>2</sub>S test powder into the collected water sample.
3. Quickly recap the test bottle and secure it tightly.
4. Shake well to dissolve the medium completely.
5. Incubate at 35-37°C for 24-48 hours and take observations.

### QUALITY CONTROL SPECIFICATIONS

|                             |   |   |
|-----------------------------|---|---|
| <b>Appearance of powder</b> | : | Light yellow to yellowish brown colored, homogeneous powder |
| <b>Appearance of Medium</b> | : | Dark amber coloured clear solution on addition of water     |
| <b>Sterility Test</b>       | : | Passes release criteria                                     |

### INTERPRETATION

Cultural characteristics observed after Incubation.

| Microorganism                 | ATCC  | Inoculum (CFU/ml) | Growth    | H <sub>2</sub> S production/ Colour of the medium | Incubation Temperature | Incubation Period |
|-------------------------------|-------|-------------------|-----------|---|------------------------|-------------------|
| <i>Salmonella</i> Typhimurium | 14028 | 50-100            | Luxuriant | Positive reaction/ Black                          | 35-37°C                | 24-48 Hours       |
| <i>Citrobacter freundii</i>   | 8090  | 50-100            | Luxuriant | Positive reaction/ Black                          | 35-37°C                | 24-48 Hours       |

### STORAGE

Dehydrated powder, hygroscopic in nature, store in the dark at 10-25°C and protect from direct sunlight. The powder may be used up to the expiration date and incubated for the recommended incubation times.



**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, or any other signs of deterioration.

**DISPOSAL**

After use, prepared media, specimen/sample containers and other contaminated materials must be sterilized before discarding as per standard protocol.



Quantity



Lot / Batch Number



Temperature Unit



Manufacturer



Best Before



Certification of Good Manufacturing Practices



Catalogue No.



Authorized Representative  
MedNet GmbH  
Barkhausen 10,  
48153 Münster, Germany



European Conformity



Consults Instructions for use :



QR Code



For In Vitro Diagnostic Use

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**

**Revision: 23<sup>rd</sup> March, 2022**