TMK 11- SULPHATE REDUCING BACTERIA TEST KIT
(1 PACK CONTAINS: 10 BOTTLES)

INTENDED USE

For the detection of Sulphate Reducing Bacteria for testing 100 ml water sample.

PRODUCT SUMMARY AND EXPLANATION

Desulfovibrio is usually the predominant genus in mixed culture of sulfate reducing bacteria. They play most important role in the water and wastewater field. *Desulfuricans* reduces sulfates and other sulfur compounds to hydrogen sulphide. These organisms are a major problem to the petroleum industry as they cause corrosion to iron pipes leading to perforations in the oil well system pipes. They are widely distributed in nature and are present in most soils and waters but other types of bacteria except in special environment bacteria out number them. Microbial analysis of water or deposit sample collected from the system may be performed either by laboratory analysis or by field analysis. The basic procedure for both of these techniques involves the addition of water or deposit sample: into a container to which nutrients have been added and incubation of the sample. The field test is relatively simpler and substantially cheaper as it does not require great deal of training or expertise.

KIT CONTAINS

- Sulphate Reducing Bacteria Test Powder

PRINCIPLE

The detection and estimation of these bacteria is done on the basis of their ability to grow and produce sulphide in this medium. For the estimation, dilutions of water samples are inoculated. Sulphate reducing bacteria convert sulphate to sulphide, which with the ferrous ion gives black colour.

INSTRUCTION FOR USE

1. Fill the bottle with water upto arrow level (100 ml). Allow to dissolve the powder completely by gentle shaking.
2. Keep at room temperature, (preferably at 20-30°C) upto 6 days & observed for complete blackening of the medium after every 24 hours and further upto 6 days to confirm negative results.
3. After incubation if colour turns black, it indicates presence of SRB (Sulphate Reducing Bacteria).
4. Disposal - Add few drops of any disinfectant (i.e. Dettol, phenol etc.) and after 30 minutes discard the bottle by pouring contents of bottle into the toilet and flush preferable to use the autoclave wherever the facility is available.

QUALITY CONTROL SPECIFICATIONS

Appearnce of powder	:	Clear to slightly opalscent solution
Appearance of medium	:	Dark Amber, clear solution obtained on addition of water
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural characteristics observed after Incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	H_2S Production	Incubation Temperature	Incubation Period
Desulfovibrio desulfuricans	29577	50-100	Luxuriant	Positive reaction, blackening of the medium	25-44°C	24-72 Hours

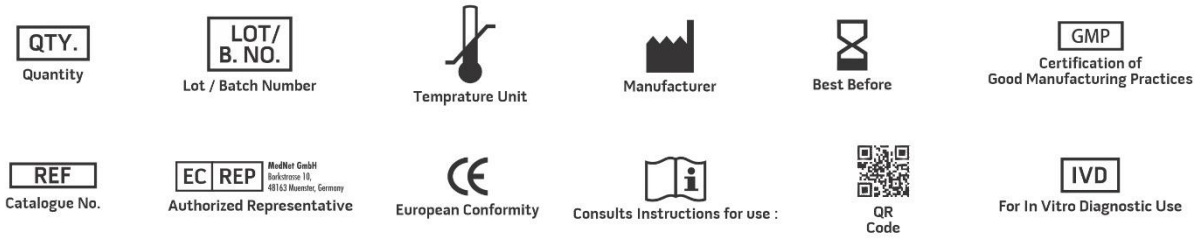
STORAGE

Store the medium in a dark and dry place at 10- 25°C and protect from direct sunlight. The medium 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.



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

***For Lab Use Only**

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