TM 1024 - MOX AGAR

INTENDED USE
For cultivation of *Yersinia enterocolitica* from foods.

PRODUCT SUMMARY AND EXPLANATION
Yersinia enterocolitica, a gram-negative coccobacillus shaped bacterium, is often isolated from clinical specimens such as wounds, faeces, sputum and mesenteric lymph nodes. It is a foodborne pathogen responsible for gastroenteritis. However, it is not a part of the normal human flora. Strains of *Y. enterocolitica* can be found in meats (pork, beef, lamb, etc.), oysters, fish, and raw milk. MOX Agar is formulated as per APHA for the cultivation of *Y. enterocolitica*, a causative agent of human illness caused due to consumption of contaminated food.
Aseptically collected food samples are sealed in containers to prevent dehydration, contamination in transit and to protect handlers. In case of delay, refrigeration is preferable to freezing since the latter may result in cell injury. *Yersinia* is sensitive to acid conditions, therefore acid foods and fermented products should be analyzed promptly. *Yersinia* is a psychrotroph hence cold enrichment at 4°C has been commonly used as the incubation temperature.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	15.000
Soya peptone	5.000
Sodium chloride	5.000
Magnesium chloride hexahydrate	4.067
Sodium oxalate	2.680
Agar	15.000

PRINCIPLE
Tryptone and soya peptone in the medium provide essential growth nutrients. Magnesium chloride and sodium oxalate enhance growth of *Y. enterocolitica*.

INSTRUCTION FOR USE
- Dissolve 46.75 grams in 1000 ml purified/distilled water.
- Heat to boiling with stirring to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C. Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS
Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Yellow coloured opalescent to slightly hazy gel forms in Petri plates.
pH (at 25°C) : 7.5±0.2

INTERPRETATION
Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Yersinia enterocolitica	27729	50-100	Good-luxuriant	>=50 %	25-30°C	24-48 Hours

PACKAGING:
In pack size of 500 gm bottles.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL
After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES
1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed.,Washington D.C.
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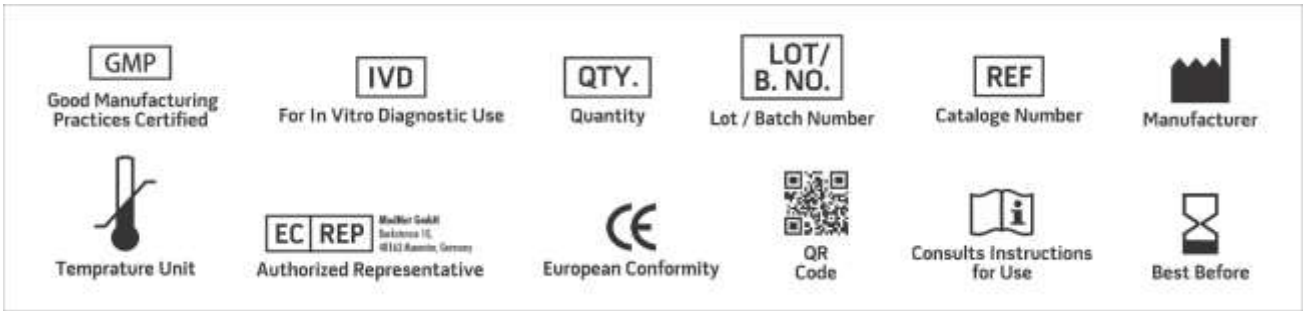
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
5. Salfinger Y., and Tortorello M.L., 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.
6. Vanderzant C., Splittstoesser D. F., 1992, Compendium of Methods for the Microbiological Examination of Foods, 3rd Ed., APHA, Washington, D.C
7. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed.,APHA Inc., Washington, D.C.



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