TM 1230 – LIVER BROTH, MODIFIED

INTENDED USE

For presumptive and enrichment test of Clostridia & other anaerobes from food & other products.

PRODUCT SUMMARY AND EXPLANATION

Clostridial species are one of the major causes of food poisoning / gastro-intestinal illnesses. Among the family, *Clostridium perfringens* is commonly found in wound infections and diarrhea cases. The major virulence factor of *C. perfringens* is the CPE enterotoxin, which is secreted upon invasion of the host gut, and contributes to food poisoning and other gastrointestinal illnesses.

COMPOSITION

Ingredients	Gms / Ltr
Liver granules	50.000
Dextrose (Glucose)	10.000
Disodium hydrogen phosphate	2.000

PRINCIPLE

This medium contains Liver granules and dextrose which provide the nitrogen, amino acids, vitamins and carbon sources. Disodium hydrogen phosphate buffers the medium. Bundesanstalt initiated the development of liver granules to prepare this culture for Fleischforschung. For testing sample using Liver Broth, Modified, immerse a small piece of the material to be tested in hot Liver Broth (appox. 80°C) and cover with a layer of sterilized paraffin. Incubate for 18-24 hours at 37°C. Gas production indicates that clostridia are probably present.

INSTRUCTION FOR USE

- Dissolve 62.0 grams in 1000 ml distilled water.
- Soak for 15 minutes with occasional stirring. Dispense the well mixed, turbid broth in 18 mm tubes to a depth of 50 mm, so that the bottom of the tube is filled with Liver granules.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool, inoculate the specimen to be tested in hot Liver broth, modified (at 80°C). Cover with a layer of Vaseline or paraffin.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Brown coloured granules.
Appearance of prepared medium : Medium amber coloured, clear to slightly opalescent supernatant over insoluble granules.
pH (at 25°C) : 7.6 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation (for *Clostridium* species incubate anaerobically).

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Gas production	Incubation Temperature	Incubation Period

Clostridium perfringens	10543	50-100	Good	Positive reaction	35-37°C	18-24 Hours
Clostridium sporogenes	11437	50-100	Good	Positive reaction	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Good	Negative reaction	35-37°C	18-24 Hours
Staphylococcus aureus subsp. aureus	25923	50-100	Good	Negative reaction	35-37°C	18-24 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. Coretti K. 1962. Berl. Munch. Tierarztl. Wschr., 75:20 .
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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.

GMP Good Manufacturing Practices Certified	IVD For In Vitro Diagnostic Use	QTY. Quantity	LOT/ B. NO. Lot / Batch Number	REF Catalogue Number	Manufacturer
Temprature Unit	EC REP MedNet GmbH Borkstrasse 10, 48163 Muenster, Germany Authorized Representative	CE European Conformity	QR Code	Consults Instructions for Use	⌛ Best Before

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

***For Lab Use Only**

Revision: 08 Nov., 2019