Differential Reinforced Clostridial Broth

Intended Use
Differential Reinforced Clostridial Broth is used for cultivation of Clostridia from water.

Summary
Differential Reinforced Clostridial Broth is based on the formulation described by Barnes and Ingram and Gibbs and Freame. It is used for cultivation of sulphite reducing clostridia from food and enumeration in water by multiple tube method. Differentiation is based on the ability to reduce sulphite to sulphide to form black coloured iron sulphide.

Principle
Peptone, cara beef extract, yeast extract, starch and L-cysteine hydrochloride provide nutrients and co-factors. Glucose serves as the energy source. Partial selectivity of the medium is achieved by the addition of sodium acetate. L-cysteine hydrochloride also acts as a reducing agent.

Formula*

Ingredients	**g/L**
Peptone	10.0
Yeast Extract	1.5
Sodium Acetate	5.0
Cara Beef Extract#	10.0
Glucose	1.0
L-Cysteine Hydrochloride	0.5
Starch	1.0
Final pH (at 25°C)	7.2 ± 0.2

*Adjusted to suit performance parameters
Equivalent to Beef Extract

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Food and dairy samples
Water samples

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 29.00 g of the powder in 1000 mL purified / distilled water.
2. Boil with frequent agitation to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Just before use add 0.5 mL filter sterile solution prepared by mixing equal volumes of 4% w/v solution of sodium sulphite and 7% w/v ferric citrate to 25 mL of single strength medium or 0.4 mL and 2 mL to 10 mL and 50 mL of double strength medium respectively. Mix well.

Quality Control

Dehydrated Appearance: Yellow coloured, homogeneous, free flowing powder.
Prepared Appearance: Light yellow to amber coloured, clear solution without any precipitate.
Cultural Response: Cultural characteristics observed in an anaerobic atmosphere, after an incubation at 30ºC-35ºC for 1 week.

Organisms (ATCC)	**Growth**	**H_2S**
Clostridium perfringens (13124)	Good	+
Clostridium sporogenes (11437)	Good	+

Key: + = Blackening of the medium

Interpretation of results

Blackening of the medium presumptively indicates the presence of *Clostridia.*

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

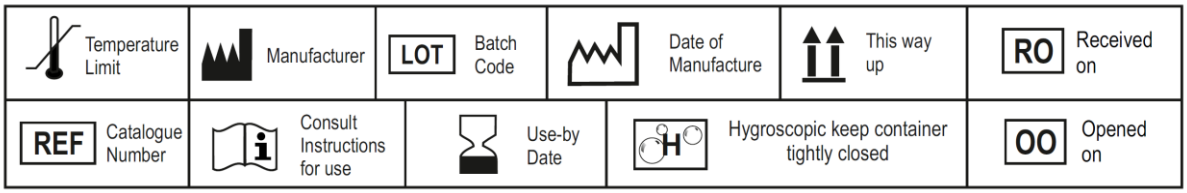
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Barnes EM and Ingram M; 1956, J. Appl. Bact.
2. Gibbs BM and Freame B; 1965 J. Appl. Bact.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	**Product description**	**Pack Size**
201040110100	Dehydrated Culture Media	100 g
201040110500	Dehydrated Culture Media	500 g



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Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.