

## CM 20341 – BUFFERED PEPTONE WATER W/ PYRUVATE

### INTENDED USE

For the isolation of Enterohemorrhagic E. coli (EHEC).

### PRODUCT SUMMARY AND EXPLANATION

Enterohemorrhagic E. coli (EHEC) can cause severe foodborne disease. EHEC is the primary cause of hemorrhagic colitis. This infection can also lead to hemolytic uremic syndrome. It is transmitted to humans primarily through consumption of contaminated foods, such as raw or undercooked ground meat products and raw milk. Its significance as a public health problem was recognized in 1982, following an outbreak in the United States of America. EHEC produces toxins, known as verotoxins or Shiga-like toxins because of their similarity to the toxins produced by Shigella dysenteriae. Antibiotic supplement contains Acriflavin, Cefsulodin, and Vancomycin which effectively suppress the normal flora while allow the growth of Escherichia coli O157:H7. After the sample has been prepared, material will be placed in Buffered Peptone Water w/Pyruvate and incubated at  $37 \pm 1$  °C for 5 hours. Next add rehydrated contents of one vial of Acriflavin-Cefsulodin-Vancomycin Supplement (ACV Supplement, TS 267) and incubate at  $42 \pm 1$  °C for 18-24 hours.

### COMPOSITION

Ingredients	Gms / Ltr
Tryptone	10.000
Lactose	10.000
Yeast extract	6.000
Casein acid hydrolysate	5.000
Sodium chloride	5.000
Disodium hydrogen phosphate	3.600
Potassium dihydrogen phosphate	1.500
Sodium pyruvate	1.000

### PRINCIPLE

The media contains Tryptone, Casein acid hydrolysate and Yeast extract as carbon and nitrogen sources, long chain amino acids, vitamins and sources for bacterial growth. Phosphates buffer the medium. The phosphate buffer system prevents bacterial damage due to changes in the pH of the medium. Sodium chloride maintains the osmotic balance. Lactose serves as a carbon source.

### INSTRUCTION FOR USE

Suspend 21.05 grams in 500 ml purified / distilled water.

Heat if necessary to dissolve the medium completely.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

Cool to 45-50°C and aseptically add the rehydrated contents of one vial of Acriflavin-Cefsulodin-Vancomycin Supplement (ACV Supplement, FD284).

### QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium	: Amber coloured, clear solution without any precipitate.
pH (at 25°C)	: $7.2 \pm 0.2$

### INTERPRETATION



Cultural characteristics observed after incubation.

Microorganism	ATCC	Growth	Recovery	Incubation Temperature	Incubation Period
Staphylococcus aureus subsp. aureus	25923	Inhibited	0%	42± 1 °C	18-24 Hours
Salmonella Typhimurium	14028	Good	40-50%	42± 1 °C	18-24 Hours
Enterococcus faecalis	29212	Inhibited	0%	42± 1 °C	18-24 Hours
Escherichia coli	25922	Inhibited	0%	42± 1 °C	18-24 Hours

#### PACKAGING:

Inpacksizeof100gm and 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

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

#### REFERENCES

1. [www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalyticalmanualBAM/default.html](http://www.fda.gov/Food/ScienceResearch/LaboratoryMethods/BacteriologicalAnalyticalmanualBAM/default.html).
2. [www.who.int/mediacentre/factsheets/fs125/en/](http://www.who.int/mediacentre/factsheets/fs125/en/).

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Birkstrasse 10, 48143 Moenster, Germany</small>	 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 LabUse Only

