

Specimen Preservative Medium Base (SP Hajna)

M300

Intended Use:

For collection, transportation and preservation of stool specimens or rectal swabs for the isolation of members of *Enterobacteriaceae*.

Composition**

| Ingredients | g / L |
|--------------------------------|--------------|
| Yeast extract | 1.000 |
| Ammonium phosphate | 4.000 |
| Potassium dihydrogen phosphate | 2.000 |
| Sodium chloride | 5.000 |
| Sodium citrate | 5.000 |
| Magnesium sulphate | 0.400 |
| Sodium deoxycholate | 0.500 |
| Final pH (at 25°C) | 7.0±0.2 |

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 17.9 grams in 700 ml purified/distilled water. Heat if necessary to dissolve the medium completely. Add 300 ml of neutral glycerol. Mix well. Dispense into tubes or flasks as desired. Sterilize by autoclaving at Δ 115°C for 15 minutes. Δ corresponds to 10 lbs pressure.

Principle And Interpretation

Specimen Preservative Medium (SP Hajna) is designed for transport and preservation of clinical specimen. Transport media were primarily developed by Moffet et al (1) and Stuart et al (2) for carrying *Gonococcal* specimens. Transport media are chemically defined, semisolid, non-nutritive, phosphate buffered media that provide a reduced environment. These media are formulated to maintain the viability and/or infectivity of the microorganisms without significant growth during the period between collection and culture of the specimen. This medium is suitable for preserving gram-negative rods such as *Salmonella*, *Shigella* and *Klebsiella*. In comparative studies using Specimen Preservation Medium Base and glycerin preservation solution for different *Salmonella*, *Shigella* and *Klebsiella* strains, it was observed that preservation of organisms were twice more effective in Specimen Preservation Medium Base.

Specimen Preservative Medium is made inhibitory for gram-positive organisms by sodium deoxycholate and sodium citrate. Sodium, magnesium, potassium salts control permeability of bacterial cells. Sodium chloride helps in maintaining osmotic balance in medium. Yeasts extract acts as the source of nitrogen, vitamins and growth factors.

Type of specimen

Clinical samples - Stool specimens or Rectal swabs

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. All specimens should be transported to the laboratory without delay and at maintained temperature until processed.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder.

Colour and Clarity of prepared medium

Light amber coloured clear solution

Reaction

Reaction of 1.79% w/v aqueous solution at 25°C. pH : 7.0±0.2

pН

6.80-7.20

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

| Organism | Inoculum (CFU) | Recovery (on Soyabean Casein Digest Agar |
|---|-------------------|---|
| # Klebsiella aerogenes ATCC 13048 (00175*) | 50-100 | good-excellent, no increase in number |
| Escherichia coli ATCC 25922 (00013*) | 50-100 | good-excellent, no increase in number |
| Klebsiella pneumoniae ATCC 13883 (00097*) | 50-100 | good-excellent, no increase in number |
| Shigella flexneri ATCC 12022 (00126*) | 50-100 | good-excellent, no increase in number |
| Salmonella Typhimurium ATCC 14028 (00031*) | 50-100 | good-excellent, no increase in number |

Key : (*) Corresponding WDCM numbers. (#) Formerly known as Enterobacter aerogenes

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

Reference

1. Moffett M., Young D. and Stuart R. D., 1948, Brit, Med. J., 2:241.

2. Stuart S. D., Toshach S. R. and Patsula T. M., 1954, Can. J. Public Health, 45:73.

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.

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In vitro diagnostic

medical device

IVD



Storage temperature

-30°C

Do not use if package is damaged

Disclaimer :

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