# Technical Data

## Wilson Blair HiVeg™ Agar w/ BG

**MV332**

### Intended Use:

Recommended for isolation and preliminary identification of *Salmonella* Typhi from clinical specimens.

### Composition**

| Ingredients | Gms / Litre |
|---|---|
| HiVeg™ extract | 5.000 |
| HiVeg™ peptone | 10.000 |
| Dextrose (Glucose) | 5.000 |
| Disodium hydrogen phosphate | 4.000 |
| Ferrous sulphate | 0.300 |
| Bismuth sulphite indicator | 8.000 |
| Brilliant green | 0.025 |
| Agar | 20.000 |
| Final pH ( at 25°C) | 7.7±0.2 |

**Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 52.32 grams in 1000 ml purified/distilled water. Heat gently with frequent agitation until the medium is dissolved completely. **DO NOT AUTOCLAVE.** Cool to 50-55°C. Mix well to disperse precipitate and pour thick plates (25 ml medium per plate). Dry the plates before use, avoiding over drying.

### Principle And Interpretation

Wilson and Blair Agar was formulated by Wilson and Blair (8) for isolating *Salmonella* species especially *Salmonella* serotype Typhi from clinical specimens.

Wilson Blair HiVeg™ Agar w/ BG is prepared by using vegetable peptones in place of animal based peptones which make the media free of BSE/TSE risks. HiVeg™ extract and HiVeg™ peptone provide nitrogenous, carbonaceous compounds and other growth nutrients. Brilliant green dye inhibits all gram-positive bacteria. Dextrose is the fermentable carbohydrate. Ferrous sulphate is an indicator of H2S production. Bismuth is a heavy metal which is inhibitory to most gram-negative enteric bacilli other than *Salmonella*. Ferrous sulphate is reduced by *Salmonella* species in presence of bismuth sulphite and dextrose to form iron sulphide, indicated by black coloured colonies.

### Type of specimen

Clinical samples - Faeces; Food and dairy samples; Water samples.

### Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (3,4). For food and dairy samples, follow appropriate techniques for sample collection and processing as per guidelines (1,7,8). For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards.(2) After use, contaminated materials must be sterilized by autoclaving before discarding.

### Warning and Precautions

In Vitro diagnostic use. 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. Further biochemical and serological tests must be carried out for further identification.

### 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**
Greenish yellow coloured homogeneous free flowing powder
**Gelling**
Firm, comparable with 2.0% agar gel.
**Colour and Clarity of preapred medium**
Light yellow coloured clear to slightly opalescent gel.

**Reaction**
Reaction of 5.23% w/v aqueous solution at 25°C. pH : 7.7±0.2

**pH**
7.50-7.90

**Cultural Response**
Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours

| Organism | Inoculum (CFU) | Growth | Recovery | Colour of colony |
|---|---|---|---|---|
| *Escherichia coli* ATCC 25922 (00013*) | >=$10^4$ | inhibited | 0% | |
| *Proteus mirabilis* ATCC 25933 | 50-100 | luxuriant | >=50% | green |
| *Salmonella* Typhi ATCC 6539 | 50-100 | luxuriant | >=50% | black with sheen |
| *Salmonella* Typhimurium ATCC 14028 (00031*) | 50-100 | luxuriant | >=50% | black with sheen |

Key : *Corresponding WDCM numbers.

## Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 20-30°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 clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (3,4).

## Reference

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.

2. Baird R.B., Eaton A.D., and Rice E.W., (Eds.), 2015, Standard Methods for the Examination of Water and Wastewater, 23rd ed., APHA, Washington, D.C.

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. MacFaddin J., 1985, Media for the Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.

6. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, 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.

8. Wilson and Blair, 1929, J. Pathol. Bacteriol., 29 : 310.

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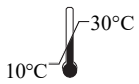
IVD ***In vitro* diagnostic medical device**




**Storage temperature**

EC REP

CEpartner4U, Esdoornlaan 13,
3951DB Maarn, NL
www.cepartner4u.eu

**CE Marking**

**Do not use if package is damaged**

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