

## **VTM**

Transport medium for Viruses, Chlamydia, Mycoplasma and Ureaplasma.

#### **DESCRIPTION**

VTM is a liquid medium used for transport of clinical specimens from the collection site to the testing laboratory.

This medium allows survival of even fragile organisms for relatively long periods of time at room temperature. Some of the viruses and bacteria that can be maintained in VTM are the following:

- SARS-CoV-2 (the virus responsible for COVID-19)
- Herpes Simplex virus
- Varicella-Zoster virus
- Influenza Type A
- Respiratory Syncytial virus
- Cytomegalovirus
- Chlamydia trachomatis
- Mycoplasma hominis
- Ureaplasma urealyticum
- Mycoplasma pneumoniae

## **COMPOSITION**

Sucrose

Hanks Balanced Salt Solution (HBSS)

Bovine Serum Albumin (BSA)

**Buffered Solution** 

Gelatin

Amino acids

**Antimicrobial Agents** 

Phenol Red

Final pH  $7.3 \pm 0.2$  at 25°C

# METHOD PRINCIPLE

Sucrose acts as cryoprotectant ensuring organism viability during freeze-thaw. HBSS provides essential inorganic ions and along with buffered solution maintains pH and osmotic balance. BSA, gelatin and amino acids help to stabilise virus particles and to sustain viability for bacteria. Antibiotics and antimycotics are included to inhibit growth of bacteria and fungi. Phenol red is the pH indicator ensuring medium integrity at the time of specimen collection.

## **DIRECTIONS FOR USE**

- 1. Collect swab specimens according to standard technique using a swab with a synthetic tip and a plastic shaft.
- 2. After collection, immediately place the swab specimen into a VTM tube.
- 3. Identify the tube containing the specimen.
- 4. Send promptly to the laboratory.

Specimens may be dispatched at ambient (10-25°C) or refrigerated temperature to arrive at the laboratory for processing within 48 hours.

If a delay in testing or shipping is expected, specimens should be frozen at -70°C or below (repeated freezing and thawing of specimens should be avoided as may reduce the recovery of viable organisms).

## Notes:

- VTM is intended for transport of specimens only and must not be taken internally.
- VTM must not be used for premoistening or prewetting the swab prior to collecting the sample or for rinsing or irrigating the sampling sites.
- Swabs are Not Provided with this device.
- When choosing the collection swab, it is important to know that certain swab components may reduce recovery of some microorganisms or interfere with molecular detection methods. For example, calcium alginate swabs and wooden shaft swabs should not be used.
- All specimens collected for laboratory investigations should be regarded as potentially infectious.

• Condition, timing, and site of sampling as well as the type and volume of specimen are significant variables in obtaining reliable culture results. Refer to appropriate guidelines for detailed explanation of test procedure and sample collection.

## **APPEARANCE**

Clear, light orange-red.

#### **STORAGE**

Store at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

#### SHELF LIFE

1 year.

## **QUALITY CONTROL**

The medium is tested using appropriate quality control strains and specifications as outlined in the Certificate of Analysis (CoA) available for each lot on Liofilchem's website.

#### WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is intended for professional use only and must be used by properly trained operators.

## **DISPOSAL OF WASTE**

Disposal of waste must be carried out according to national and local regulations in force.

### **REFERENCES**

- 1. World Health Organization (2020). <a href="https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance">https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance</a>
- 2. Center for Disease Control and Prevention (2020). Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 (COVID-19). <a href="https://www.cdc.gov/coronavirus/2019-ncov/lab/guidelines-clinical-specimens.html">https://www.cdc.gov/coronavirus/2019-ncov/lab/guidelines-clinical-specimens.html</a>
- 3. Public Health England (2017). Chlamydia trachomatis infection testing by Nucleic Acid Amplification Tests (NAATs). UK Standards for Microbiology Investigations. V 37 Issue 4. <a href="https://www.gov.uk/ukstandards-for-microbiology-investigations-smi-quality-and-consistency-in-clinical-laboratories">https://www.gov.uk/ukstandards-for-microbiology-investigations-smi-quality-and-consistency-in-clinical-laboratories</a>
- 4. Clinical and Laboratory Standards Institute (2014). Quality Control of Microbiological Transport Systems; Approved Standard Second Edition. CLSI document M40-A2.
- 5. Leland, D.S. (1992). Concepts of clinical diagnostic virology, p. 3-43, In E.H. Lennette (ed.), Laboratory Diagnosis of Viral Infections, Second Edition. Marcel Dekker, Inc., New York.
- 6. Johnson, F.B. (1990). Transport of Viral Specimens. Clinical Microbiology Reviews 3(2):120-131.

PRESENTATION	Format	Packaging	Ref.
VTM	16 x 100 mm Skirted Tube with Screw Cap	100 tubes	26490

TABLE OF SYMBOLS						
LOT Batch code	IVD	In Vitro Diagnostic Medical Device		Manufacturer	Use by	Fragile, handle with care
REF Catalogue number		Temperature limitation	$\sum$	Contains sufficient for <n> tests</n>	Caution, consult Instruction For Use	Do not reuse

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