

InTray™ MSA (Mannitol Salt Agar)

For the selective isolation, differentiation and enumeration of staphylococci from clinical and non-clinical materials. This agar meets *United States Pharmacopeia (USP)*, *European Pharmacopeia (EP)* and *Japanese Pharmacopeia (JP)* performance specifications.

VALUE

High Throughput – Once the device is inoculated, no other preparation is required saving time

Cost Savings – Reduces laboratory materials and medical waste

High specificity – Selective for the growth of coagulase-positive Staphylococci

BENEFITS

Convenient - Combines collection, culture, and observation into one device

Easy to use - Minimal lab procedures and equipment needed

Easy to store – 6 month shelf life under refrigeration

Easy observation – No fogging or condensation on the InTray™ viewing window

Safe - Fully enclosed InTray™ system prevents contamination and reduces exposure to collected samples

PRODUCT SPECIFICS

Storage –Refrigeration (2-8 °C)

Shelf Life – 6 months

Incubation – 35 ± 2°C for 24–48 hours

Quantity Sold

20 Pack (19-1201)

5 Pack (19-1207)

PRODUCT BIO

BioMed's InTray™ MSA is a microbiology sample collection, transport, and culture device for the growth, observation and selective isolation of staphylococci. This device isolates presumptive staphylococci based on their ability to grown on agar media with 7.5% sodium chloride. A change of the phenol red indicator (mannitol fermentation) aids in isolation and identifications of *Staphylococcus*.

BioMed's patented InTray™ MSA saves time and money while reducing exposure to collected samples by combining several procedures into a single device.



The patented InTray™ system consists of an outer, re-sealable label with an optically clear, anti-fog window covering the media, which creates an airtight seal over the 2" diameter agar surface. The innovative design of the InTray™, with its unique, high-performance viewing window, can be placed directly under a microscope while remaining sealed removing the need to prepare slides or expose the sample once the device has been inoculated. **By combining both growth and observation into one fully enclosed system, the InTray™ MSA increases throughput while decreasing the cost of laboratory materials and medical waste.**

Additionally, the InTray™ design lends itself to high performance in laboratory or controlled point-of-care settings as well as off-site locations or austere environments. The InTray™ MSA is a fully enclosed system equipped with a small air filter and does not require any reagents or complicated procedures to inoculate or obtain presumptive results.

Visual Results:

- Coagulase-positive staphylococci –Yellow colonies with yellow zones
- Coagulase-negative staphylococci – Red colonies with no color change to medium
- *Micrococcus* - White to orange colonies, with no color change to the medium

QUALITY CONTROL

At the time of manufacture, quality control testing is performed on each lot of the InTray™ MSA to ensure viability and sterility. These tests are repeated through the end of the product shelf life by BioMed Diagnostics confirming the ability of the InTray™ MSA to support growth while maintaining specificity.

BACKGROUND

Staphylococci are ubiquitous, present on many surfaces and as part of the human flora. Among healthy adults in the general population, the carrier rate spans from 11-32% with a 25% prevalence rate in hospital personnel. Infections are often caused by the carriage of staphylococcal organisms, such as *Staphylococcus aureus*, to sites with breaks in the dermal surface. Sites of infection can occur at catheter or operative insertion points, but can also enter through minor dermal breaks occurring from eczema or from shaving. Infections can have severely adverse health affects in immunocompromised hosts. For example, following infection from catheter related *S. aureus* acquisition, 20-30% develop serious complications or fatal sepsis. Staphylococci remain one of the top five causes of nosocomial infections.

MSA agar is one of the mediums recommended by the American Society for Microbiology for enumeration of gram-positive bacteria in cosmetics and is recommended in *the Manual of Clinical Microbiology, 12th Edition* and the *Clinical Microbiology Procedures Handbook, 2nd Edition* for clinical specimens. The *USP* recommends this agar in enumerating gram-positive bacteria in pharmaceuticals and for isolating *S. aureus* in the microbiological examination of non-sterile products.



CORPORATE OVERVIEW

BioMed Diagnostics, Inc., a boutique biotech firm and an industry leader since 1989, develops and manufactures *in vitro* diagnostic devices. BioMed's point-of-care ready tests provide accurate diagnostic tools for scientists worldwide to aid in the identification of bacteria, parasites and fungi. The company formed as the result of a mercy mission conducted by a group of physicians to Central America; there they discovered the need for robust diagnostic tools for use in austere environments. Their experience unleashed the inspiration for BioMed's innovative products that support medical professionals, veterinarians, research teams, and environmental and industry scientists globally.

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DIRECTION

To inoculate the InTray™ MSA, pull back the lower right corner of the label adjacent to the clear window until the protective seal is completely visible.

Remove the seal by pulling the tab, discard the seal but do not remove the white filter strip over the vent hole.

Obtain a small amount of specimen sample and place sample on top of the agar. The 2" diameter well allows for a large enough surface area to streak for isolation.

To incubate the device, return the label to its original position so the optically clear anti-fog window covers the medium. Press the edges of the label against the plastic tray to ensure an airtight seal. Best practice suggests incubation at $35 \pm 2^\circ\text{C}$ for 24-48 hours checking between 18-24 and 48 hours or following recommended Standard Methods. Consult appropriate reference for ultimate sample collection, incubation and confirmation procedure.

DETECTION

Observe for colony growth and appearance through the clear window. For examination using a microscope, simply place the InTray™ MSA on the microscope and observe through the clear viewing window. Following incubation, the plates should show isolated colonies in streaked areas and confluent growth in areas of heavy inoculation.

REFERENCES

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