



Milliflex® Growth Media Selection Guide



KEY
USP United States Pharmacopoeia 27-NF22
EP European Pharmacopoeia 6th Edition
Standard Methods Standard Methods for the Examination of Water and Waste Water, 20th Edition
ISO* International Organization for Standardization

NOTE
Suspect colonies should be verified. Agar is pre-poured into Milliflex agar cassettes and used with the Milliflex System.

For more information: www.millipore.com/dr_media
1-800-MILLIPORE (1-800-645-5476)

Yeast and Mold

	Sabouraud Dextrose Agar	Sabouraud Dextrose Agar with Chloramphenicol	Yeast and Mold Agar
Catalogue Number	MXSMCSD48	MXSMCSP48	MXSMCYM48
Application	Designed for the recovery of a broad range of fungi (yeast and mold) found in various types of water. Some fungi may be inhibited by the acidic pH of the medium.	Designed for the recovery of a broad range of fungi (yeast and mold) found in various types of water. Chloramphenicol will inhibit most bacteria.	Recommended for the isolation and cultivation of yeast, mold and other aciduric microorganisms.
Incubation Time & Temperature	Harmonized: 5 - 7 days at 20 - 25°C	Harmonized: 5 - 7 days at 20 - 25°C	42 hrs - 5 days at 20 - 25°C
Typical Colony Appearance	Yeast produces white colonies with creamy texture. Mold colonies are rough textured and/or filamentous. Bacteria capable of growth produce clear to white colonies.	Yeast produces white, creamy colonies. Mold colonies are rough textured and/or filamentous.	Yeast produces white colonies with a creamy texture. Mold colonies are rough textured and/or filamentous. Bacteria will be smaller and clear to white.
pH at 25 °C	5.6 ± 0.2	5.6 ± 0.2	6.2 ± 0.2

Total Viable Organism/Total Viable Count

	Heterotrophic Plate Count (HPC) Agar	Plate Count Agar	R2A	Tryptic Soy Agar (TSA)	Tryptic Soy Agar with Polysorbate 80 and Lecithin	Tryptone Glucose Extract Agar
Catalogue Number	MXSMHPC48	MXSMPCA48	MXSMCRA48	MXSMCTS48	MXSMTLP48	MXSMTGE48
Application	Used for the recovery of heterotrophic plate count bacteria found in various types of water, especially high purity water and treated potable water. It is also suitable for other water samples with low counts.	Designed for total microbial count in water and other samples.	This low nutrient agar is used for the recovery of stressed heterotrophic plate count bacteria found in various types of water.	Used for the recovery of a broad range of fastidious, heterotrophic microorganisms such as common aerobic and facultative anaerobic bacteria found in various types of water.	Used for determining the efficiency of the sanitation of containers, equipment and surfaces as well as for water miscible cosmetic products. It contains two commonly used neutralizers: Lecithin and Polysorbate 80.	Used for the recovery of microorganisms in water, wastewater and dairy products.
Incubation Time & Temperature	18 - 72 hrs at 30 - 35 °C	18 - 72 hrs at 30 - 35 °C	Standard Methods: 5 - 7 days at 20 - 28°C EP: 5 days at 30 - 35°C	Harmonized: 3 - 5 days at 30 - 35°C	18 - 72 hrs at 35°C	18 - 120 hrs at 20 - 35°C
Typical Colony Appearance	Clear to white colonies; some may produce pigment.	Clear to white colonies; some may produce pigment.	Clear to white colonies; some may produce pigment.	Clear to white colonies; some may produce pigment.	Clear to creamy white colonies; some may produce pigment.	Clear to creamy white colonies; some may produce pigment.
pH at 25 °C	7.1 ± 0.2	7.0 ± 0.2	7.2 ± 0.2	7.3 ± 0.2	7.3 ± 0.2	7.0 ± 0.2

Bacterial Selective

	Mannitol Salt Agar	Baird Parker Agar	Cetrimide Agar	Cetrimide Agar with Naladixic Acid	KF Strep Agar	MacConkey Agar	m-Endo LES Agar	Pseudomonas Isolation Agar (PIA)
Catalogue Number	MXSMMSA48	MXSMBPA48	MXSMCET48	MXSMCET24	MXSMKFS48	MXSMCMC24	MXSMEND48	MXSMPIA48
Application	This medium, highly concentrated in sodium chloride, is recommended for isolating <i>Staphylococci</i> . It is also used for the determination of mannitol fermentation, which enables to differentiate staphylococcal species.	For the detection and enumeration of <i>Staphylococcus</i> species in process water.	Isolation and identification of <i>Pseudomonas aeruginosa</i> found in various types of water.	The combination of cetrimide with sodium nalidixate improves the recovery of <i>Pseudomonas aeruginosa</i> and inhibits growth of <i>Klebsiella</i> , <i>Proteus</i> , and <i>Providencia</i> species.	Designed for the recovery of <i>Enterococci</i> found in various types of water.	For the selective isolation, cultivation and differentiation of lactose from non-lactose fermenting Gram negative enteric bacteria. It can also be used in examining water for coliforms.	Used to detect total coliform population in water.	Selective medium for isolating <i>Pseudomonas</i> species from water samples. It is also differential for <i>P. aeruginosa</i> by allowing formation of soluble blue-green pyocyanin pigment.
Incubation Time & Temperature	18 - 72 hrs at 30 - 35°C	24 - 48 hrs at 30 - 35°C	Harmonized: 18 - 72 hrs at 30 - 35°C	ISO: 48 hrs at 37°C	18 - 72 hrs at 30 - 35°C	Standard Methods: 24+/- 2 hrs at 35°C Harmonized: 18 - 72 hrs at 30 - 35°C	Standard Methods: 22 - 24 hrs at 35°C	18 - 72 hrs at 35°C
Typical Colony Appearance	Mannitol fermenting <i>S. aureus</i> colonies are large and surrounded by a yellow zone. <i>S. epidermidis</i> colonies are generally small and surrounded by a red or reddish zone. <i>Micrococci</i> colonies are large white to orange.	<i>S. aureus</i> colonies are black; other colonies are white to brown.	<i>P. aeruginosa</i> appear as green to blue colonies with fluorescence under UV wavelength.	<i>P. aeruginosa</i> appear as green to blue colonies with fluorescence under UV wavelength.	<i>Enterococci</i> colonies appear red or pink.	Lactose fermenting organisms will appear red. Non-lactose fermenters will appear colorless to white or yellow.	Coliform colonies appear deep reddish with distinct green metallic sheen.	Most <i>Pseudomonas aeruginosa</i> will produce blue to green colonies.
pH at 25 °C	7.4 ± 0.2	6.8 ± 0.2	7.2 ± 0.2	7.1 ± 0.2	7.2 ± 0.2	7.1 ± 0.2	7.2 ± 0.2	7.0 ± 0.2