MM0342 Acetamide Broth

Broth for confirm the presence of Pseudomonas aeruginosa in bottled water, water intended for human consumption or pool waters.

Microbiological response:

Organisms	Result after addition of Nessler reagent
E. coli ATCC 25922	No colour
Pseudomonas aeruginosa ATCC 27853	Orange-yellow colour

MM0190 Aeromonas Agar base (Ryan's modification)

This medium is a modified version of the original XLD formulation to support the growth of *Aeromonas* spp. especially *Aer. hydrophila*. It is used in investigation of enteric disease , water and food (poultery, fish, seafood) industry.

Microbiological response:

Organism	Result / colony
Aeromonas hydrophila ATCC 7966	Growth / greenish, dark centered
E. coli ATCC 25922	inhibition

MM0030 Amies Broth Without Charcoal

This chemically defined, semisolid media for transporting and preserving action of clinical swab specimens, prolongs the survival of microorganisms,

Microbiological response, swab sample with 0.1 ml 1000-10000 CFU suspension, after 18-24 hours at room temperature:

Organism	Result
Bacteroides fragilis ATCC 8482	Viable at 18-24 hours
Neisseria meningitidis ATCC 13090	Viable at 18-24 hours
Streptococcus pneumoniae ATCC 6305	Viable at 18-24 hours
Streptococcus pyogenes ATCC 19615	Viable at 18-24 hours

MM0048 Amies Broth With Charcoal

This chemically defined, semisolid media for transporting and preserving action of clinical swab specimens, prolongs the survival of microorganisms, especially *Neisseria gonorrhoeae.*

Microbiological response, swab sample with 0.1 ml 1000-10000 CFU suspension, after 18-24 hours on room temperature:

Organism	Result
Bacteroides fragilis ATCC 8482	Viable at 18-24 hours
Neisseria gonorrhoea ATCC 13090	Viable at 18-24 hours

MM0151 Anaerobe Isolation Agar

A primary isolation medium capable of growing most clinically significant anaerobes.

Microbiological response at 37 °C, under anaerobic condition, after 2- 5 days incubation:

Organism	Result
Bacteroides fragilis ATCC 25285	Growth
Clostridium perfringens ATCC 13124	Growth

MM0087 Anaerobe Isolation Broth

It is recommended to the primary culture of spore-forming and non-spore-forming strict anaerobes and of facultative anaerobes.

Microbiological response at 37 °C after 24-72 hours incubation:

Organism	Result
Bacteroides fragilis ATCC 25285	Growth
Clostridium perfringens ATCC 13124	Growth

MM0299 Azide Dextrose Broth

This medium is used for the detection and enumeration of D streptococci in water and food samples.

Microbiological response at 37 °C after 18-48 hours incubation:

Organism	Result
Escherichia coli ATCC 25922	inhibited
Enterococcus faecalis ATCC 29212	growth
Staphylococcus aures ATCC 25923	inhibited

MM0289 Bacillus Cereus Medium

Solid selective medium, according to Mossel, for the detection and enumeration of *Bacillus cereus*.

Microbiological response:

Organism	Result	Appearance
Bacillus cereus ATCC 11778	Growth	Pinkish with halo
Bacillus cereus ATCC 13061	Growth	Pinkish with halo
Bacillus subtilis ATCC 6633	Growth	Yellow/pink with halo
Escherichia coli ATCC 25922	Inhibited	

MM0203 Baird-Parker Agar

Medium used for the enumeration with confirmation of colonies of staphylococci from food.

Microbiological response:

Organism	Growth	Appearance
Proteus mirabilis ATCC 12453	Good	Brown
Escherichia coli ATCC 25922	None	
Staphylococcus aureus ATCC 25923	Good	Black
Staphylococcus epidermidis ATCC 12228	Poor to good	Black

MM0141 Liquid Baird-Parker Base

This medium is a liquid version of Baird-Parker agar without egg-yolk component. It gives acceptible selectivity while shows being non-inhibitory to the inoculated *S. aureus* cells.

Microbiological response after 18-24 hours at 35°C:

Organisms	Growth
Escherichia coli ATCC 25922	None
Staphylococcus aureus ATCC 25923	Good

MM0136 Bile Esculin Agar

For the isolation and presumptive identification of enterococci (Group D streptococci).

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Growth, Esculin (-)
Enterococcus faecalis ATCC 29212	Growth, Esculin (+)
Streptococcus pyogenes ATCC 19615	Inhibited, Esculin (-)
Listeria monocytogenes ATCC 7644	Inhibited

MM0259 Bile Esculin Azide Agar

It is a modificated version of Bile esculin agar with reduced bile salts concentration and addition of sodium azide, which gives better selectivity and good recovery of group D streptococci. Enterococci.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Partially inhibited, no colour
Enterococcus faecalis ATCC 29212	Growth, Esculin (+)

MM0283 Bismuth Sulphite Agar

Bismuth sulphite agar is a selective medium used to isolate *Salmonella typhi* and other enteric bacilli.

Microbiological response:

Organism	Result
Salmonella typhi ATCC 50076	Black colonies, metallic sheen around
Proteus mirabilis ATCC 12453	Inhibited, green, brown colonies, no metallic sheen
Escherichia coli ATCC 50034	Inhibited

MM0109 Blood Agar Base

Basic medium for Blood Agar, for isolation and cultivation of fastidious bacteria and for detection of haemolytic activity of streptococci and other microorganisms.

Microbiological response at 37 °C, after 18-24 hours:

Organism	Result	Haemolysis
Staphylococcus aureus ATCC 25923	Growth	Beta
Streptococcus pneumoniae ATCC 6305	Growth	Alpha
Streptococcus pyogenes ATCC 19615	Growth	Beta

MM0120 Blood Agar Base No. 2

This agar base, enriched with blood, is a medium used for the isolation of fatidious bacteria without interfering with their haemolytic reactions.

Microbiological response at 37 °C, after 18-24 hours:

Organism	Result	Haemolysis
Staphylococcus aureus ATCC 25923	Growth	Beta
Streptococcus pneumoniae ATCC 6305	Growth	Alpha
Streptococcus pyogenes ATCC 19615	Growth	Beta

MM0175 Brain Heart Infusion Agar

This agar is recommended for the cultivation of a wide variety of fastidious microorganisms including *Streptococci, Neisseria*, yeasts and molds.

Microbiological response:

Organism	Result
Neisseria meningitidis ATCC 13090	Growth
Streptococcus pneumoniae ATCC 6305	Growth
Streptococcus pyogenes ATCC 19615	Growth

MM0106 Brain Heart Infusion Broth

Broth used for the cultivation of a wide variety of fastidious microorganisms, including streptococci, pneumococci and meningococci and further bacteria, yeasts and moulds, especially fastidious species.

Microbiological response at 37 °C, for 18-48 hours:

Organism	Result
Neisseria meningitidis ATCC 13090	Growth
Streptococcus pneumoniae ATCC 6305	Growth
Streptococcus pyogenes ATCC 19615	Growth

MM0127 Brilliant Green Bile Broth

Selective broth for the detection of coliform microorganisms in food products and water.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Growth, gas (+)
Enterobacter aerogenes ATCC 13048	Growth, gas (+)
Enterococcus faecalis ATCC 29212	Inhibited, gas (-)
Staphylococcus aureus ATCC 25923	Inhibited, gas (-)

MM0167 Brilliant Green Agar (Modified)

Medium for the selective isolation of salmonellae other than Salmonella typhi.

Microbiological response:

Organism	Result
Salmonella typhimurium ATCC 14028	Good growth
Escherichia coli ATCC 25922	Negative, inhibited
Proteus vulgaris ATCC 13315	Negative, inhibited

MM0131 Brucella Agar

The medium is recommended for the cultivation of *Brucella spp.* and other fastidious organisms.

Microbiological response at 35 °C after 48-72 hours:

Organism	Result
Brucella abortus ATCC 4315	Growth
Brucella melitensis ATCC 4309	Growth

MM0049 Buffered Peptone Water

Use as a pre-enrichment medium for the isolation of *Salmonella* spp. from various food sources.

Microbiological response:

Organism	Result
Salmonella typhimurium ATCC 14028	Growth
Salmonella enteritidis ATCC 13076	Growth

MM0072 Campylobacter Enrichment Broth

This medium is a selective broth for detection of *Campylobacter* spp from food and enviromental samples.

Microbiological response, after 2-4 hours incubation on 37 °C followed by 18-44 hours incubation at 42 °C:

Organisms	Result
Campylobacter jejuni ATCC 33291	growth
Escherichia coli ATCC 25922	inhibited

MM0130 Campylobacter Blood-free medium

This blood free medium was formulated to replace blood with charcoal and support the growth of C. jejuni, C.coli, C. lari.

Microbiological response:

Organisms	Result
Campylobacter jejuni ATCC 33291	growth
Escherichia coli ATCC 25922	inhibited

MM0054 Cary Blair transport medium

Modified Stuart transport medium for Gram negative and anaerobic organisms.

MM0148 Cetrimide Agar

Medium, used for the selective isolation of *Pseudomonas aeruginosa*.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Inhibited
Staphylococcus aureus ATCC 25923	Inhibited
Pseudomonas aeruginosa ATCC 27853	Growth, yellow-green to blue pigment

MM0261 China Blue Lactose agar

Standard non-inhibitory medium to cultivate, differentiate and enumerate of wide range of bacterias in dairy products.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Good growth, blue colonies
Enterococcus faecalis ATCC 19433	Good growth, blue colonies
Proteus mirabilis ATCC 12453	Good growth, colorless colonies

MM0120 Chocolate Agar

This agar base, enriched with blood, is a medium used for the isolation of fatidious bacteria without interfering with their haemolytic reactions. It also allows the formation of pigments. The medium can be made selective by the addition of different antibiotic mixtures: Colistin/Oxolinic acid, Neomycin, Colistin / Nalidixic acid. With chocolated bood it gives good recovery of Haemophilus spp.

Microbiological response :

Organism	Result
Staphylococcus aureus ATCC 25923	growth , Beta
Streptococcus pneumoniae ATCC 6305	growth, Alpha
Streptococcus pyogenes ATCC 19615	growth, Beta
Haemophilus influenzae ATCC 35056	growth

MM0096 CLED Agar, double indicator

A dehydrated culture medium recommended for the isolation and enumeration of urinary microorganisms.

Microbiological response after 18-24 hours incubation at 37 °C:
The plates should not be incubated more than 24 hours as the lactose fermenting organisms will mask the non-lactose fermenter

Organism	Result
Escherichia coli ATCC 25922	Growth/ deep orange-red
Salmonella typhimurium ATCC 14028	Growth/ blue
Staphylococcus aureus ATCC 25923	Growth/ gold yellow
Proteus mirabilis ATCC 12453	Growth/ blue

MM0097 CLED Agar, single indicator

This is a rich, nutritious culture medium recommended for the selective isolation, enumeration and differentiation of pathogens, cousing urinary tract infections.

Microbiological response after 18-24 hours incubation at 37 °C:

Organism	Result
Escherichia coli ATCC 25922	Growth/ Yellow
Salmonella typhimurium ATCC 14028	Growth/ blue
Staphylococcus aureus ATCC 25923	Growth/ Yellow
Proteus mirabilis ATCC 12453	Growth/ blue

MM0137 Columbia Agar Base

Rich medium highly suitable for the culture of fastidious bacteria, especially with the addition of blood.

Microbiological response:

Organism	Result	Haemolysis
Streptococcus pneumoniae ATCC 6303	Growth, good to excellent	Alpha
Streptococcus pyogenes ATCC 19615	Growth, good to excellent	Beta
Staphylococcus aureus ATCC 25923	Excellent growth	Beta/gamma

MM0133 Columbia CNA Agar

For the selective isolation, cultivation and differentiation of Gram-positive cocci, especially staphylococci and streptococci from clinical specimens.

Microbiological response after 18-24 hours incubation at 37 °C:

Organism	Result	Haemolysis
Proteus mirabilis ATCC 12453	Inhibited	-
Staphylococcus aureus ATCC 25923	Growth	Beta
Streptococcus pneumoniae ATCC 6305	Growth	Alpha
Streptococcus pyogenes ATCC 19615	Growth	Beta

MM0412 Czapek-Dox Agar

Czapek Dox Agar is a semisynthetic medium used for the general cultivation of fungi

Microbiological response:

Organisms	Result after addition of Nessler reagent
Aspergillus niger ATCC 16404	Woolly and black mycelium
Candida albicans ATCC 10231	Off-white creamy colonies

MM0166 Desoxycholate Citrate Lactose Succrose Agar (DCLS)

This medium is used for the isolation of *Salmonella*, *Shigella* spp. and Vibrio species.

Microbiological response

Organism	Result
Staphylococus aureus ATCC 25923	Inhibited
Shigella flexneri ATCC 12022	Growth, clear to pink colonies
Salmonella typhimurium ATCC 14028	Growth, clear to pink colonies
Enterococcus faecalis ATCC 29212	Inhibited

MM0173 Deoxycholate Citrate Agar (DCA Hynes)

A modification of Leifson's D.C.A. medium is a selective isolation medium for detection and differentiation of enteric pathogens, especially *Salmonella* and *Shigella* species.

Microbiological response after 18-24 hours incubation at 37 °C:

Organism	Result
Escherichia coli ATCC 25922	Inhibited
Salmonella typhimurium ATCC 14028	Good to excellent with black center
Shigella sonnei ATCC 25931	Good growth, straw colonies

MM0077 Dextrose Tryptone Agar

The medium is used to detect and enumerate of thermophiles and mesophiles spores in food stuff.responsible for flat-sour.

Microbiological response after 3 days at 32·C for mesophiles and 2 days at 55·C for thermophiles :

Organism	Result
Bacillus stearothermophilus ATCC 10149	growth , yellow colonies on 55·C
Bacillus subtilis ATCC 6633	growth , yellow colonies on 37·C

MM0240 Differential Reinforced Clostridial medium

Ths medium is used for the enumeration of *Clostridium* spp. in food samples.

Microbiological response after 3 days at 35°C, under anaerobic conditions:

Organism	Result
Clostridium perfringens ATCC 13124	Good to excellent growth, with blackening

MM0134 DNase Test Agar

For the differentiation of microorganisms, especially *Staphylococcus* species and *Serratia marcescens* based on their production of deoxyribonuclease.

Microbiological response after 18-24 hours at 37 °C:

Organism	Result
Serratia marcescens ATCC 8100	Positive
Staphylococcus aureus ATCC 25923	Positive
Staphylococcus epidermidis ATCC 12228	Negative

MM0123 Diagnostic Sensitivity Agar (DSTA)

Semisynthetic medium for antibiotic susceptibility testing.

Microbiological response after 18-24 hours incubation at 37 °C:
For appropriate antibiotic zone diameter see the NCCLS standards.

Organism	Result
Staphylococcus aureus ATCC 25923	Growth
Pseudomonas aeruginosa ATCC 27853	Growth
Escherichia coli ATCC 25922	Growth
Enterococcus faecalis ATCC 29212	Growth

MM0263 E.C. broth

For the cultivation and differentiation of coliform bacteria at 37°C and of E. coli at 45.5°C.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Growth
Staphylococcus aureus ATCC 25923	No growth

MM0250 EC Broth modified

This medium is selective for *Escherichia coli*. Due to its reduced bile salts content, it can be used for direct enrichment of *E. coli* from food and enviromental samples, for damaged organisms. The usage of novobicin supplement (20 mg/l) increases the selectivity and inhibits several sensitive bacterial strains.

Microbiological response:

Organism	Result / colony
Staphylococcus aureus ATCC 25923	inhibited
E. coli ATCC 25922	Growth,yellow color
Enterococcus faecalis ATCC 33186	none to poor

MM0161 E.E. Broth (Mossel)

Selective enrichment medium for enterobacteria in food products.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Growth
Salmonella typhi ATCC 14028	Growth
Staphylococcus aureus ATCC 25923	No growth

MM0110 EMB agar (Levine)

This medium is used for isolation and differentiation of Gram-negative enteric bacteria based on lactose fermentation.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Growth
Enterobacter aerogenes ATCC 13048	Growth
Proteus vulgaris ATCC 13315	Growth
Staphylococcus aureus ATCC 25923	Inhibited

MM0132 Endo Agar

Medium used for the isolation of enterobacteria.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Growth
Enterobacter aerogenes ATCC 13048	Growth
Proteus vulgaris ATCC 13315	Growth
Staphylococcus aureus ATCC 25923	No growth

MM0189 Fraser Broth

Selective broth for primary and secondary enrichment of Listeria ssp. in the analysis of food products.

Microbiological response:

Organism	Result
Listeria monocytogenes ATCC 19115	Growth
Escherichia coli ATCC 25922	Inhibition
Enterococcus faecalis ATCC 19433	Inhibition
Staphylococcus aureus ATCC 25923	Inhibition

MM0116 GC Agar Base

Medium used for the cultivation and isolation of *Neisseria* and *Haemophilus* with the addition of haemoglobin and some chemical enrichment.

Microbiological response:

Organism	Result
Haemophilus influenzae ATCC 10211	Growth
Neisseria gonorrhoeae ATCC 43069	Growth
Proteus vulgaris ATCC 13315	Negative
Staphylococcus aureus ATCC 25923	Negative

MM0401 Giolitti-Cantoni Broth

Anaerobic enricment broth for Staphylococcus aureus.

Microbiological response:

Organisms	Result / blackening
Stap. Aureus ATCC 25923	growth / +
E. coli ATCC 25922	inhibited

MM0264 GSP agar

For the selective isolation and cultivation of Pseudomonas species.

Microbiological response:

Organisms	Result
Aeromonas caviae ATCC 15476	Growth, yellow colonies
E.coli ATCC 25923	marked inhibition
Pseudomonas aeruginosa ATCC 27853	growth, red violet colonies

MM0207 Hektoen Enteric Agar

For the isolation and cultivation of Gram-negative enteric microorganisms (Salmonella and Shigella) from clinical specimens.

Microbiological response:

Organism	Result / Colony colour
Enterobacter aerogenes ATCC 13048	Growth / yellow with bile precipitate
Escherichia coli ATCC 25922	Inhibited / yellow-orange bile
Proteus vulgaris ATCC 13315	Inhibited / clear to yellowish
Salmonella typhimurium ATCC 14028	Growth / green black centers
Shigella flexneri ATCC 12022	Growth / blue-green colonies

MM0145 Helicobacter pylori medium

Selective medium used for the isolation of Helicobacter pylori.

Microbiological response:

Organisms	Result
H. pylori ATCC 51653	Growth, grey colonies
St. Aureus ATCC 25923	Inhibited

MM0085 Iso-Sensitest agar

Medium recommended for antimicrobial susceptibility testing. Closely defined medium with stabilized mineral content. Inhibition diameters in conform NCCLS standards.

Microbiological response:

Organism	Result
Staphylococcus aureus ATCC 25923	Growth
Pseudomonas aeruginosa ATCC 27853	Growth
Escherichia coli ATCC 25922	Growth
Enterococcus faecalis ATCC 29212	Growth

MM0291 King B agar

Medium optimised for the detection of *Pseudomonas* spp. by producing fluorescein.

Microbiological response:

Organisms	Result
Escherichia coli ATCC 25922	growth, no pigment
Pseudomonas aeruginosa ATCC 27853	growth, yellow-green pigmentation

MM0194 Kligler Iron Agar

For the differentiation and identification of Enterobacteriaceae.

Microbiological response after 18-24 hours at 35°C:

Organism	Slope	Butt	Gas	H_2S
Shigella sonnei	Red	Yellow	-	-
Salmonella typhi	Red	Yellow	-	+
Enterobacter	Red	Yellow	+	-
Escherichia coli	Yellow	Yellow	+	-
Citrobacter freundii	Yellow	Yellow	+	+
Proteus vulgaris	Red	Yellow	-	+

MMS215 Kovacs Reagent

This supplement is for the qualitative procedure for determining the ability of bacteria to produce
indole by deamination of tryptophan. Positive indol reaction indicated by pink colour.
100-500ml

Microbiological response :

Organism	Result
E. coli ATCC 25922	pink

MM0035 Lactose Broth

Pre-enrichment broth for *Salmonella* species, recommended by U.S.P

Microbiological response:

Organism	Result
Proteus mirabilis ATCC 12453	Growth, gas -
Salmonella typhimurium ATCC 14028	Growth, gas -
Pseudomas aeruginosa ATCC 27853	Growth, gas -
Enterococcus faecalis ATCC 29212	Growth, gas -
Enterobacter aerogenes ATCC 13048	Growth, gas +
Escherichia coli ATCC 25922	Growth, gas +

MM0219 Lactose Sulphate Broth

Broth for the detection and conformation of spores of Clostridium in food products after incubation at 46 °C.

Microbiological response:

Organism	growth / lactose fermentation / H2S
Clostridium perfringens ATCC 13124	+/+/+

MM0188 Listeria Oxford Agar

A selective medium for the isolation of Listeria spp. in clinical samples or food.

Microbiological response after 24h culture at 37°C:

Organism	Result
Listeria monocytogenes ATCC *19115*	Black/brown colonies with black halo
E.coli ATCC 25922	No culture
Staph. Aureus. ATCC 25923	No culture

MM0351 Lowenstein Jensen agar

Selective medium for the isolation, enumeration and differentiation of Mycobacteria

Microbiological response:

Organism	Result
E Coli ATCC 25922	partial inhibition
Mycobacterium tubercolosis ATCC 25177	Growth

MM0185 MacConkey Agar

For the selective isolation, cultivation and differentiation of coliforms and enteric pathogens.

Microbiological response:

Organism	Result / lactose
Escherichia coli ATCC 25922	Growth / + with bile precipitate
Shigella sonnei ATCC 25931	Growth / -
Enterococcus faecalis ATCC 29212	No growth

MM0174 Mac Conkey Agar No.2.

Fore the selective isolation, cultivation and differentiation of coliforms and enteric pathogens based ont he ability to ferment lactose. Lactose-fermenting organisms appear as red to pink colonies, others as colorless or transparent colonies.

Microbiological response:

Organism	Result
Enterococcus faecalis ATCC 29212	growth , red
E. coli ATCC 25922	growth, pink-red
Proteus mirabilis ATCC 12453	growth, colorless
Salmonella typhimurium ATCC 14028	growth, colorless

MM0172 MacConkeyAgar No. 3

For the selective isolation, cultivation and differentiation of coliforms and enteric pathogens with purified bile salts.

Microbiological response:

Organism	Result / lactose
Escherichia coli ATCC 25922	Growth / + with bile precipitate
Shigella sonnei ATCC 25931	Growth / -
Enterococcus faecalis ATCC 29212	No growth

MM0176 MacConkey Agar without CV

For the detection of *Enterobacteriaceae*, *Enterococci* and some staphylococci,

Microbiological response:

Organism	Result
Staphylococcus aureus ATCC 25923	Growth
Enterococcus faecalis ATCC 29212	Growth
Escherichia coli ATCC 25922	Growth, pink colonies, with bile precp.
Proteus mirabilis ATCC 12453	Growth, clear colonies
Salmonella typhimurium ATCC 14028	Growth, clear colonies

MM0158 MacConkey Agar Without Salt and CV

This is a modified MacConkey medium. By electrolyte deficiency due to the lack of NaCl, swarming of *Proteus* species is suppressed.

Microbiological response:

Organism	Result
Staphylococcus aureus ATCC 25923	Growth, pink to red colonies
Enterococcus faecalis ATCC 29212	Growth, pink to red colonies
Escherichia coli ATCC 25922	Growth, pink colonies with bile precp.
Proteus mirabilis ATCC 12453	Growth, clear, swarming inhibited
Salmonella typhimurium ATCC 14028	Growth, clear colonies

MM0094 MacConkey Broth

MacConkey Broth is used to detect Gram-negative, lactose-fermenting, enteric bacteria, recommended by WHO.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Growth, yellow, gas +
Enterobacter aerogenes ATCC 13048	Growth, yellow, gas +
Salmonella typhimurium ATCC 14028	Growth, purple, gas -
Enterococcus faecalis ATCC 29212	Growth inhibited

MM0220 Magnesium Oxalate agar

This agar is a medium developed for the cultivation of *Yersinia* enterocolitica from food samples.

Microbiological response:

Organism	Result
Yersinia enterocolitica ATCC 9610	growth

MM0164 Malt Extract Agar

A medium for the detection, isolaion and enumeration yeasts and moulds.

Microbiological response:

Organism	Result
Candida albicans ATCC 10231	Good growth
Aspergillus niger ATCC 16404	Good growth

MM0050 Malt Extract Broth

Medium used for enrichment and cultivation of yeasts and moulds.

Microbiological response:

Organism	Result
Aspergillus niger ATCC 16404	Good growth
Candida albicans ATCC 10231	Good growth

MM0213 Mannitol Salt Agar

The medium is used for the selective isolation, cultivation and enumeration of staphylococci from clinical and nonclinical specimens.

Microbiological response:

Organism	Result
Staphylococcus aureus ATCC 25923	Colonies surrounded by a yellow halo
Staphylococcus epidermidis ATCC 12228	Colonies surrounded by a red zone
Escherichia coli ATCC 25922	Inhibited
Proteus mirabilis ATCC 29906	Inhibited

MM0603 MIL Medium

Microbiological response is based on indole reaction after 35 ± 2°C for 18-24 hours incubation

Escherichia coli 25922

Providencia alcalifaciens9886

Salmonella enterica serotype Enteritidis13076

Shigella flexneri12022

MM0061 Milk Plate Count Agar

Plate Count agar APHA with antibiotic free skimmed milk recommended by BSI, gives standard results testing dairy products and to count colony forming units per ml of sample.

Microbiological response:

Organism	Result
Staphylococcus aureus ATCC 25923	Good growth

MM0205 MRS agar (*deMan, Rogosa, Sharpe)*

The medium is used for the detection and enumeration of lactobacilli frpom food products.

Microbiological response after 48h anaerobic culture at 30°C:

Organism	Result
Lactobacillus delbrueckii subs. ATCC 4797	Good growth
Lactobacillus rhamnosus casei ATCC 9595	Good growth

MM0177 MRS broth (*deMan, Rogosa, Sharpe)*

The medium is used for the detection and enumeration of lactobacilli frpom food products.

Microbiological response after 24-48h anaerobic culture at 30°C:

Organism	Result
Lactobacillus delbrueckii subs. ATCC 4797	Good growth
Lactobacillus rhamnosus casei ATCC 9595	Good growth

MM0086 MSRV medium

Modified Semisolid Rappaport Vassiliadis Medium is a semisolid medium to detect motile *Salmonella* spp. from food and enviromental samples.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Inhibited
Salmonella typhimurium ATCC 14028	Good growth, with a diameter of minimum 30 mm

MM0135 Mueller Hinton Agar, NCCLS

Medium recommended for antimicrobial susceptibility testing.

Microbiological response after 24h at 37°C:

Organism	Result
Staphylococcus aureus ATCC 25923	Growth
Pseudomonas aeruginosa ATCC 27853	Growth
Escherichia coli ATCC 25922	Growth
Enterococcus faecalis ATCC 29212	Growth

MM0056 Mueller Hinton Broth

A broth that is a complement to the agar medium of the same name used for studying the sensitivití of bacteria to antibiotics.

Microbiological response after 24h at 37°C:

Organism	Result
Staphylococcus aureus ATCC 25923	Growth
Pseudomonas aeruginosa ATCC 27853	Growth
Escherichia coli ATCC 25922	Growth
Enterococcus faecalis ATCC 29212	Growth

MM0056 Mueller Kauffman Tetrathionate Broth base

Medium used for selective enrichment of Salmonella for their detection in foods for testing of non-sterile Pharmacopoeia products.

Microbiological response:

Organism	Result
Salmonella typhimurium ATCC 14028	Good growth, colorless colonies
Salmonella enteritidis ATCC 13076	Good growth, colorless colonies
Escherichia coli ATCC 25922	Partially inhibited, red colonies
Staphylococcus aureus ATCC 25923	Inhibited

MM0060 Mycoplasma Broth PPLO w/o CV

This medium can be used for the isolation and enrichment of mycoplasma spp from clinical specimens.

Microbiological response:

Organism	Result
Lactobacillus delbrueckii subs. ATCC 4797	Good growth
Lactobacillus rhamnosus casei ATCC 9595	Good growth

MM0073 Nutrient Agar

Nutrient agar is a basic medium for the cultivation and maintenance of a wide variety of microorganisms.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Good growth
Enterococcus faecalis ATCC 19433	Good growth
Pseudomonas aeruginosa ATCC 27853	Good growth

MM0036 Nutrient Broth Economy

Broth for the cultivation of a wide variety of nonfastidious microorganisms.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Good growth
Enterococcus faecalis ATCC 19433	Good growth
Pseudomonas aeruginosa ATCC 27853	Good growth

MM0206 PALCAM Agar

Selective medium for the isolation, cultivation and differentiation of Listeria monocytogenes and other Listeria species from food.

Microbiological response:

Organisms	Result
Listeria monocytogenes ATCC 19115	Grey/green colonies with black halo
E.coli ATCC 25922	inhibited
Stap. Aureus ATCC 25923	inhibited

MM0038 Peptone Water

Used for the cultivaton of nonfastidious microorganisms, for carbohydrate fermentation tests, and for performing the indole test.

Microbiological response:

Organism	Result
Salmonella typhimurium ATCC 14028	Growth
Salmonella enteritidis ATCC 13076	Growth

MM0150 Perfringens Agar

Medium used for the enumeration of Clostridium perfringens in food products.

Microbiological response:

Organism	Result
Clostridium perfringens ATCC 13124	Good growth, black colonies

MM0051 Plate Count Agar

Agar medium used for enumeration of the total aerobic flora of food products

Microbiological response:

Organism	Growth	Reaction
Staphylococcus aureus ATCC 25923	Good	+

MM0064 Plate Count Agar, APHA

Agar medium used for enumeration of the total aerobic flora of food products.

Microbiological response:

Organism	Result
Staphylococcus aureus ATCC 25923	Good growth

MM0138 Plate Count Agar v/o Glucose

For the enumeration of micro-organisms revitalized in water by the techique of aerobiotic colony count at 22°C and at 36°C.

Microbiological response after 24h:

Organism	Result
Staphylococcus aureus ATCC 25923	Good growth
Escherichia coli ATCC 25922	Good growth
Enterococcus faecalis ATCC 19433	Good growth

MM0117 Potato Dextrose Agar

For the cultivation and enumeration of yeasts and molds from dairy and food products.

Microbiological response:

Organism	Result
Aspergillus niger ATCC 16404	Woolly and black mycelium
Candida albicans ATCC 10231	Off-white creamy colonies

MM0160 Pseudomonas Agar P base

For the isolation, cultivation and differentiation of Pseudomonas aeruginosa ont he basis of pigment production.

Microbiological response:

Organisms	Result
Staph. Aureus ATCC 25923	inhibited
Pseudomonas aeruginosa ATCC 27853	growth, yellowish-green pigmentation

MM0043 R2A Agar

Medium used in standard methods for pour plate, spread plate, and membrane filter analyses to enumerate heterotrophic bacteria from potable waters.

Microbiological response:

Organism	Result
Staphylococcus aureus ATCC 25923	Growth
Streptococcus pyogenes ATCC 19615	No Growth

MM0367 Raka Ray agar

Medium used for the isolation of lactic acid bacteria in beer and brewing processes.

Microbiological response after 24-48 hours at 27-30 ·C, under anaerobic condition:

Organism	Result
E.coli ATCC 25922	inhibition or poor growth
Lactobacillus fermentans ATCC 9338	good growth

MM0070 Rappaport Vassiliadis Broth

Selective enrichment broth for the detection of *Salmonella* in food products and in water.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Inhibited
Salmonella typhimurium ATCC 14028	Good growth

MM0112 Reinforced Clostridial Medium (Broth)

This medium serves for the cultivation of anaerobe species, especially Clostridium and Lactobacillus.

Microbiological response:

Organism	Result
Clostridium perfringens ATCC 13124	Good to excellent growth

MM0197 Sabouraud Dextrose Agar

The medium recommended for the cultivation and differentiation of non-pathogenic and pathogenic funghi other bacteria inhibited by the acid pH.

Microbiological Response:

Organism	Result
Escherichia coli ATCC 25922	Inhibition
Aspergillus niger ATCC 16404	Woolly and black mycelium
Candida albicans ATCC 10231	Off-white creamy colonies

MM0393 Sabouraud Chloramphenicol 0.05 Agar
MM0200 Sabouraud Chloramphenicol 0.5 Agar

Agar used for primary culture and maintenance of pathogenic and nonpathogenic fungi, particularly dermatophytes.

Microbiological Response:

Organism	Result
Escherichia coli ATCC 25922	Inhibition
Sataphylococcus aureus ATCC 2593	Inhibition
Aspergillus niger ATCC 16404	Woolly and black mycelium
Candida albicans ATCC 10231	Off-white creamy colonies

MM0323 Sabouraud Dextrose Broth

Sabouraud dextrose Broth is recommended for the detection of yeasts and molds, as well as in the pharmaceutical and cosmetic industries to comply with sterility tests.

Microbiological response after 48-72 hours at 25-30°C:

Organisms	Growth
Saccharomyces cerevisiae ATCC® 9763	+
Candida albicans ATCC 10231	+
Aspergillus brasiliensis DSM 1988	+
Lactobacillus casei subsp. *rhamnosus* ATCC 7469	+

MM0157 Sabouraud liquid medium, USP

A liquid sterility medium recommended for the isolation of non-pathogenic and pathogenic fungi and acidophilic bacteria.

Microbiological Response:

Organism	Result
Escherichia coli ATCC 25922	Inhibition
Sataphylococcus aureus ATCC 2593	Inhibition
Aspergillus niger ATCC 16404	Woolly and black mycelium
Candida albicans ATCC 10231	Off-white creamy colonies

MM0201 Sabouraud Maltose Agar

Medium used for the isolation of non-pathogenic and pathogenic funghi.

Microbiological Response:

Organism	Result
Escherichia coli ATCC 25922	Negative
Aspergillus niger ATCC 16404	Woolly and black mycelium
Candida albicans ATCC 10231	Off-white creamy colonies

MM0202 Salmonella Shigella Agar (SS agar)

For the selective isolation of pathogenic enteric bacilli, enterobacteriaceae, especially those belonging to the genus Salmonella.

Microbiological response:

Organism	Result
Enterococcus faecalis ATCC 29212	Inhibited
Escherichia coli ATCC 25922	Partial inhibition, red colonies
Salmonella typhimurium ATCC 14028	Colonies with black center
Shigella flexneri ATCC 12022	Colorless colonies

MM0294 Salty-Blood Agar Base

Medium used for enumeration with membranfilter-method of grampositive cocci from surface and bathing water.

Microbiological response:

Organism	Result
Staphylococcus aureus ATCC 25923	Growth
Streptococcus pyogenes ATCC 19615	No Growth

MM0140 Schaedler Agar

Schaedler Agar gives excellent recovery of anaerobic and microaerophilic organisms from human fecal and gastrointestinal specimens as well as aerobic microorganisms.

Microbiological response:

Organism	Result
Clostridium perfringens ATCC 13124	Growth
Bacteroides fragilis ATCC 25285	Growth
Streptococcus pyogenes ATCC 19615	Growth

MM0046 Selenite Broth Base

For the isolation and enrichment of Salmonella species from faeces and food products.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Little recovery or no increase
Salmonella typhi ATCC 6539	Good growth
Shigella flexneri ATCC 12022	Little recovery or no increase

MM0063 Simmon's Citrate Agar

Medium used for the differentiation of Enterobacteriaceae based in the utilisation of citrate as the sole source of carbon.

Microbiological response:

Organism	Result	Colour
Enterobacter aerogenes ATCC 13048	Growth	Blue
Escherichia coli ATCC 25922	Inhibited	Green
Salmonella typhimurium ATCC 14028	Growth	Blue

MM0225 Skimmed Milk Media

Skim Milk Agar is used for cultivation and enumeration of microorganisms encountered in dairy industry.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	clear zone negative reaction
Pseudomonas aeruginosa ATCC 27853	good growth positive reaction
Bacillus subtilis ATCC 6633	good growth clear zone positive reaction

MM0143 Slanetz and Bartley Agar

Selective medium to detect enterococci in food , beverage and water by membrane filtration method.

Microbiological response:

Organism	Result
Enterococcus faecalis ATCC 29212	Growth pink to red brown colonies
E, coli ATCC 25922	Inhibited
Stapphylococcus aures ATCC 25923	Inhibited

MMS043 Sodium Biselenite supplement

Gram-positive bacteria are inhibited by sodium selenite*. It is used in Selenite Broth Base, Mannitol Selenite Broth Base or Selenite Cystine Broth Base

Microbiological response :

Organism	Result
Gram positive bacteria	inhibited

MM0042 Stuart Transport Medium

Medium used for the preservation of Neisseria species an dother fastidious organisms during their transport from clinic to laboratory.

MM0183 TCBS Agar

T.C.B.S. is designed for the selective isolation of Vibrio cholerae and Vibrio parahaemolyticus.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Inhibited
Enterococcus faecalis ATCC 29212	Partially inhibited
Vibrio cholerae ATCC 9459	Growth, yellow colonies
Vibrio parahaemolyticus ATCC 17802	Growth, colorless colonies with blue-green center

MM0088 Thioglycolate Medium

For the cultivation and isolation of obligate and facultative anaerobic and microaerophilic microorganisms and for sterility tests.

Microbiological response:

Organism	Result
Bacteroides melaninogenicus (25848)	growth
Clostridium sporogenes (11437)	growth
Streptococcus mitis (9895)	growth
Streptococcus pyogenes (19615)	growth

MM0069 Thioglycollate Medium USP

For the cultivation of anaerobic, microaerophilic and aerobic microorganisms in sterility testing formulation recommended by USP.

Microbiological response:

Organism	Result
*Clostridium perfringens ATCC*13124	Growth
Staphylococcus aureus ATCC 25923	Growth
Bacteroides vulgatus ATCC 8482	Growth
Candida albicans ATCC 10231	Growth
Bacillus subtilis ATCC 6633	Growth

MM0273 Tryptose Agar

Fort he cultivation of a wide variety of fastidious microorganisms particulary Brucella

Microbiological response:

Organism	Result
Brucella abortus ATCC 4315	Good growth
Streptococcus pyogenes ATCC 19615	Good growth

MM0283 Tryptose Broth

It is used for cultivating fastidious microorganisms.

Microbiological response:

Organism	Result
Neisseria meningitidis ATCC 3090	Good
Staphylococcus epidermidis ATCC 2228	Good
Streptococcus pneumoniae ATCC 305	Good

MM0204 TSI - Triple Sugar Iron Agar

Medium used for the biochemical characterisation of food non-sterile pharmaceutical products.

Microbiological response:

Organism	Result (Slant/Butt/H_2S)
Escherichia coli ATCC 25922	A/A/-
Pseudomonas aeruginosa ATCC 27853	K/K/-
Salmonella typhimurium ATCC 14028	K/A/+
Proteus mirabilis ATCC 12453	K/A/+
Shigella flexneri ATCC 12022	K/A/-

MM0107 TSA - Triptone Soya Agar, USP

Nutrient medium for a wide range of microorganisms.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Good to excellent growth
Staphylococcus aureus ATCC 25923	Good to excellent growth
Pseudomonas aeruginosa ATCC 10145	Good to excellent growth
Salmonella typhimurium ATCC 14028	Good to excellent growth

MM0080 TSB – Triptone Soya Broth, USP

The general purpose broth for growing a wide range of bacteria and fungi.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Growth
Staphylococcus aureus ATCC 25923	Growth
Staphylococcus epidermidis ATCC 12228	Growth
Candida albicans ATCC 10231	Growth
Streptococcus pyogenes ATCC 19615	Growth

MM0104 Todd Hewit Broth

For the cultivation of Group A streptococci used in serological typing, and for the cultivation of a variety of pathogenic microorganisms.

Microbiological response:

Organism	Result
Streptococcus pneumoniae ATCC 6303	Growth
Streptococcus pyogenes ATCC 19615	Growth

MM0078 Tryptose Phosphate Broth

Medium recommended for the cultivation of streptococci, pneumococci, meningococi and other fastidious organisms.

Microbiological response:

Organism	Result
Neisseria meningitidis ATCC 13090	Growth
Staphylococcus epidermidis ATCC 12228	Growth
Streptococcus pneumoniae ATCC 6305	Growth
Streptococcus pyogenes ATCC 19615	Growth

MM0039 Tryptone Water

This medium is used for testing of indol prioduction by bacteria that has the ability to utilise tryptophane.

Microbiological response:

Organism	Result / indole reaction
Escherichia coli ATCC 25922	Growth / +
Enterobacter aerogenes ATCC 13048	Growth / -

MM0181 Tergitol 7 Agar

Agar is a selective and differential medium for identification and enumeration of Escherichia coli and other coliforms in water.

Microbiological response:

Organism	Result growth / lactose / TTC
Escherichia coli ATCC 25922	+ / + / -
Shigella flexneri ATCC 12022	+ / - / +
Staphylococcus aureus ATCC 25923	- / - / -

MM0066 Urea Agar Base

Media used for the detection of Proteus species, based on urease activity and for the identification of other members of the Enterobacteriaceae based on urease activity.

Microbiological response:

Organism	Urease reaction
Escherichia coli ATCC 25922	-
Enterobacter aerogenes ATCC 13048	-
Klebsiella pneumoniae ATCC 13883	+ (pink)
Proteus vulgaris ATCC 13315	+ (pink)

MM0028 Urea Broth Base

This is a liquid Christensen's medium formulation without agar which allows inoculation by Pasteur pipette.

Microbiological response:

Organism	Result
Proteus vulgaris ATCC 13315	Positive
Escherichia coli ATCC 25922	Negative

MM0114 Violet Red Bile Agar (Lactose)

Selective medium used for the enumeration of coliforms and thermotolerant coliforms in food products.

Microbiological response after 24h culture at 30·C:

Organism	Result
Escherichia coli ATCC 25922	Growth, pink colonies with bile precip.
Salmonella typhimurium ATCC 14028	Growth, non-purple colonies (lac-)
Enterobacter aerogenes ATCC 13048	Growth, purlpe colonies
Staphylococcus aureus ATCC 25923	Inhibited

MM0115 Violet Red Bile Glucose Agar

Medium used for the detection and enumeration of enterobacteria in food products.

Microbiological response after 24h culture at 30·C:

Organism	Result
Escherichia coli ATCC 25922	Good growth
Salmonella enteritidis ATCC 13076	Good growth
Enterobacter aerogenes ATCC 13048	Good growth
Klebsiella pneumoniae ATCC 13883	Good growth
Enterococcus faecalis ATCC 19433	Inhibited
Staphylococcus aureus ATCC 25923	Inhibited

MM0196 Vogel-Johnson Agar

Vogel-Johnson Agar permits the early detection of Staphylococcus aureus from clinical specimens and food, by selecting and identifying coagulase positive and mannitol fermenting strains.

Microbiological response:

Organism	Growth	Appearance
E. coli ATCC 25922	None	
Staph. aureus ATCC 25923	Good	Black colonies surrounded by yellow zones

MM0209 WL Nutrient Agar

WL nutrient agar is used for wide variety of organisms int he brewer industry for controlling the industrial fermentation process

Microbiological response after 40-48 hours at 31·C for yeast and 37·C for bacteria:

Organism	Result w/o cycloheximide	with cycloheximide
Lactobacillus fermentans ATCC9338	Good growth	growth
E.coli ATCC25922 ATCC 25922	Good growth	growth
Saccharomyces cerevisiae ATCC 9763	Good growth	inhibited

MM0178 Wort Agar

Medium used for the cultivation and enumeration of yeasts.

Microbiological response:

Organism	
Saccharomyces cerevisiae ATCC 9763	Good growth
E.coli ATCC 25922	inhibited

MM0100 Wort Broth

General mycological medium used for the enumaration of yeasts and moulds.

Microbiological response:

Organism	
Saccharomyces cerevisiae ATCC 9763	Good growth
Escherichia coli ATCC 25922	inhibited

MM0179 XLD Agar

Media used for the isolation and differentiation of enteric pathogens, especially *Shigella* and *Providencia* species.

Microbiological response:

Organism	**Result**
Escherichia coli ATCC 25922	Inhibited, yellow colonies
Salmonella typhimurium ATCC 14028	Red colonies with black centers
Shigella flexneri ATCC 12022	Red colonies
Enterococcus faecalis ATCC 29212	Growth inhibited

MM0059 Yeast Extract Agar

This medium is used for the plate count of heterotrophic microorganisms in water and dairy products.

Microbiological response:

Organism	**pH 6.2**	**pH 4.0**
Escherichia coli ATCC 25922	Good growth	Good growth
Lactobacillus fermentum ATCC 9338	Good growth	Good growth
Saccharomyces cerevisiae ATCC 9763	Good growth	Good growth
Candida albicans ATCC 10231	Good growth	Partial to complete inhibition

MM0192 Yersinia selective agar base (CIN)

CIN (cefsulodin-Irgasan-novobiocin) agar base is a selective medium developed for the isolation of Yersinia spp from clinical and food samples.

Microbiological response:

Organism	Result
Escherichia coli ATCC 25922	Inhibited
Proteus mirabilis ATCC 12453	Inhibited
Yersinia enterocolitica ATCC 1610	Colonies with red center

MM0125 Yeast Glucose Chloramphenicol Agar

Medium used for the enumeration of yeasts and moulds in the analysis of food products.

Microbiological response after 3 to 5 days culture at 25·C:

Organism	Result
Candida albicans ATCC 26790	+
Sacc. cerevisiae ATCC 9763	+
Aspergillus niger ATCC 16404	+
Escherichia coli ATCC 25922	Inhibition
Staph. aureus ATCC 25923	Inhibition