# Sabouraud Media (Low pH) Sabouraud Dextrose Agar • Sabouraud Dextrose Agar with Antimicrobics • Sabouraud Dextrose Agar with Lecithin and Polysorbate 80 • Sabouraud Dextrose Broth • Sabouraud Maltose Agar Sabouraud Maltose Broth • Fluid Sabouraud Medium

## **Intended Use**

Sabouraud Dextrose Agar is used in qualitative procedures for cultivation of pathogenic and nonpathogenic fungi, particularly dermatophytes. The medium is rendered more selective for fungi by the addition of antimicrobics. Sabouraud Dextrose Broth and Sabouraud Maltose Agar and Broth are also used for culturing yeasts, molds and aciduric microorganisms.

Fluid Sabouraud Medium is used for cultivating yeasts, molds and aciduric microorganisms and for detecting yeasts and molds in normally sterile materials.

Sterile Pack RODAC™ environmental sampling plates, containing Sabouraud Dextrose Agar with Lecithin and Polysorbate 80, are used for the detection and enumeration of microorganisms present on surfaces of sanitary importance. Sterile Pack plates are particularly useful for monitoring surfaces in clean rooms and other environmentally-controlled areas and are also recommended for use in air sampling equipment, such as the Surface Air System.

Sterile Pack Finger Dab™ Isolator plates are intended for sampling gloved hands.

Sabouraud Dextrose Agar and Sabouraud Dextrose Broth meet *United States Pharmacopeia* (*USP*), *European Pharmacopoeia* (*EP*) and *Japanese Pharmacopoeia* (*JP*)<sup>1-3</sup> performance specifications, where applicable.

## **Summary and Explanation**

Sabouraud Dextrose Agar is a general-purpose medium devised by Sabouraud for the cultivation of dermatophytes.<sup>4</sup> The low pH of approximately 5.6 is favorable for the growth of fungi, especially dermatophytes, and slightly inhibitory to contaminating bacteria in clinical specimens. Sabouraud Dextrose Agar is also recommended for the testing of cosmetics and food. Of the USP describe test methods for using Sabouraud Dextrose Agar when performing the microbial enumeration tests and tests for isolating *Candida albicans* from nonsterile pharmaceutical products.

The addition of antimicrobics is a modification designed to increase bacterial inhibition.

Sabouraud Dextrose Agar is also available in RODAC™ (Replicate Organism Detection and Counting) environmental sampling plates. These plates are specially constructed so that an agar medium can be over-filled, producing a meniscus or dome-shaped surface that can be pressed onto a surface for sampling its microbial burden. RODAC plates are used in a variety of programs to establish and monitor cleaning techniques and schedules. 12-16 After touching the surface to be sampled with the medium, the environmental sampling dish is covered and incubated at an appropriate temperature. The presence and number of microorganisms is determined by the appearance of colonies on the surface of the agar medium. Collection of samples from the same area before and after cleaning and treatment with a disinfectant permits the evaluation of the efficacy of sanitary procedures. The RODAC SL (secure lid) has three lugs on the base, providing a tight fit between lid and base to reduce accidental contamination.

Sabouraud Maltose Agar is a modification of Sabouraud Dextrose Agar with maltose substituted for the dextrose. It is a selective medium due to the acid pH. Davidson et al. reported that Sabouraud Maltose Agar was a satisfactory medium in their studies of infections caused by *Microsporum audouini*,



**User Quality Control** 

NOTE: Differences in the Identity Specifications and Cultural Response testing for media offered as both **Difco™** and **BBL™** brands may reflect differences in the development and testing of media for industrial and clinical applications, per the referenced publications.

## **Identity Specifications**

## **Difco™ Sabouraud Dextrose Agar**

Dehydrated Appearance: Light beige, free-flowing, homogeneous.

Solution: 6.5% solution, soluble in purified water upon

boiling. Solution is light to medium amber, very

slightly to slightly opalescent.

Prepared Appearance: Light to medium amber, slightly opalescent.

Reaction of 6.5%

Solution at 25°C: pH 5.6  $\pm$  0.2

## **Difco™ Sabouraud Dextrose Broth**

Dehydrated Appearance: Light beige, free-flowing, homogeneous.

Solution: 3.0% solution, soluble in purified water. Solution

is light amber, clear.

Prepared Appearance: Light amber, clear.

Reaction of 3.0%

Solution at 25°C: pH 5.6  $\pm$  0.2

## **Difco™ Fluid Sabouraud Medium**

Dehydrated Appearance: Off-white, free-flowing, homogeneous.

Solution: 3.0% solution, soluble in purified water. Solution

is light amber, clear to very slightly opalescent.

Prepared Appearance: Light amber, clear to very slightly opalescent.

Reaction of 3.0%

Solution at 25°C: pH 5.7  $\pm$  0.2

## **Difco™ Sabouraud Maltose Agar**

Dehydrated Appearance: Light beige, free-flowing, homogeneous.

Solution: 6.5% solution, soluble in purified water upon

boiling. Solution is light amber, slightly opalescent, may have a slight precipitate.

Prepared Appearance: Very light amber, slightly opalescent without

significant precipitate.

Reaction of 6.5%

Solution at 25°C: pH 5.6  $\pm$  0.2

## **Difco™ Sabouraud Maltose Broth**

Dehydrated Appearance: White, free-flowing, homogeneous.

Solution: 5.0% solution, soluble in purified water. Solution

is light amber, clear to slightly opalescent. Light amber, clear to slightly opalescent.

Prepared Appearance: Reaction of 5.0%

Solution at 25°C: pH 5.6  $\pm$  0.2

## Cultural Response

## **Difco™ Sabouraud Dextrose Agar**

Prepare the medium per label directions. Inoculate and incubate at  $30\pm 2^{\circ}$ C for 18-48 hours, or up to 7 days for *Trichophyton*. Incubate (\*) cultures at 20-25°C for up to 5 days. Incubate (\*\*) culture at 30-35°C for 48 hours.

ORGANISM	ATCC™	INOCULUM CFU	RECOVERY
Saccharomyces cerevisiae	9763	100-300	Good
Trichophyton mentagrophytes	9533	Undiluted	Good
Aspergillus brasiliensis (niger)*	16404	<100	Growth
Candida albicans*	10231	<100	Growth
Candida albicans**	10231	<100	Growth

### Difco™ Sabouraud Dextrose Broth

Prepare the medium per label directions. Inoculate tubes and incubate at  $30\pm 2^{\circ}\text{C}$  for 18-48 hours or up to 7 days if necessary. For (\*) culture inoculate a 125 mL bottle and incubate at 30-35°C for 48 hours. For (\*\*) culture inoculate a 125 mL bottle and incubate at 20-25°C for 3 days.

ORGANISM	ATCC™	INOCULUM CFU	RECOVERY
Aspergillus brasiliensis (niger)	16404	30-300	Good
Candida albicans	10231	30-300	Good
Lactobacillus casei	9595	30-300	Good
Saccharomyces cerevisiae	9763	30-300	Good
Candida albicans*	10231	<100	Growth
Candida albicans**	10231	<100	Growth

## **Difco™ Fluid Sabouraud Medium**

Prepare the medium per label directions. Inoculate and incubate at  $30 \pm 2^{\circ}$ C for 18-72 hours.

ORGANISM	ATCC™	INOCULUM CFU	RECOVERY
Aspergillus brasiliensis (niger)	16404	<100	Good
Candida albicans	10231	<100	Good
Saccharomyces cerevisiae	9763	<100	Good

## **Difco™ Sabouraud Maltose Agar**

Prepare the medium per label directions. Inoculate and incubate at  $30 \pm 2^{\circ}$ C for 18-48 hours or up to 7 days if necessary.

ORGANISM	ATCC™	INOCULUM CFU	RECOVERY
Aspergillus brasiliensis (niger)	16404	30-300	Good
Candida albicans	10231	30-300	Good
Saccharomyces cerevisiae	9763	30-300	Good
Trichophyton mentagrophytes	9533	30-300	Good

## Difco™ Sabouraud Maltose Broth

Prepare the medium per label directions. Inoculate tubes and incubate at  $30 \pm 2^{\circ}$ C for 18-48 hours or up to 7 days if necessary.

ORGANISM	ATCC™	INOCULUM CFU	RECOVERY
Aspergillus brasiliensis (niger)	16404	30-300	Good
Candida albicans	10231	30-300	Good
Escherichia coli	25922	30-300	Good
Lactobacillus casei	9595	30-300	Good
Saccharomyces cerevisiae	9763	30-300	Good



## **Identity Specifications**

## BBL™ Sabouraud Dextrose Agar

Dehydrated Appearance: Fine, homogeneous, free of extraneous material,

may contain a large number of minute to small

tan specks.

Solution: 6.5% solution, soluble in purified water upon

boiling. Solution is pale to medium, yellow to

tan, clear to slightly hazy.

Prepared Appearance: Pale to medium, yellow to tan, clear to slightly

hazy.

Reaction of 6.5%

Solution at 25°C: pH 5.6  $\pm$  0.2

## **BBL™ Sabouraud Dextrose Agar (prepared)**

Appearance: Light to medium tan cream to yellow; trace hazy.

Reaction at 25°C: pH 5.6  $\pm$  0.2

## **BBL™ Sabouraud Dextrose Broth (prepared)**

Appearance: Light to medium tan yellow; clear to trace hazy.

Reaction at 25°C: pH  $5.6 \pm 0.2$ 



## Candida albicans\* 10231 <100</td> Candida albicans\*\* 10231 <100</td>

Cultural Response

culture at 30-35°C for 48 hours.

Aureobasidium pullulans

Blastomyces dermatitidis

Cryptococcus neoformans

Microsporum audouinii

Nocardia asteroides

Penicillium roquefortii

Trichophyton mentagrophytes

Aspergillus brasiliensis (niger)\*

Candida albicans

ORGANISM

BBL™ Sabouraud Dextrose Agar

**BBL™** Sabouraud Dextrose Agar (prepared)
Inoculate and incubate at 25 ± 2°C for 7 days. Incubate *Candida albicans*ATCC™ 60193 and *Trichophyton* for 3 days. Incubate (\*) cultures at 20-25°C; 5 days for *Aspergillus* and 2 days for *Candida*. Incubate (\*\*) culture at 30-35°C for 2 days.

Prepare the medium per label directions. Inoculate and incubate at  $25 \pm 2^{\circ}$ C

for 7 days. Incubate (\*) cultures at 20-25°C for up to 5 days. Incubate (\*\*)

ATCC™

9348

56218

60193

32045

9079

19247

9295

9533

16404

INOCULUM CFU

Undiluted

Undiluted

Undiluted

Undiluted

Undiluted

Undiluted

Undiluted

Undiluted

<100

RECOVERY

Good

Good

Good

Good

Good

Good

Good

Good

Growth

Growth

Growth

ORGANISM	ATCC™	INOCULUM CFU	RECOVERY
Candida albicans	60193	Undiluted	Good
Microsporum audouinii	9079	Undiluted	Good
Nocardia asteroides	19247	Undiluted	Good
Penicillium roquefortii	9295	Undiluted	Good
Trichophyton mentagrophytes	9533	Undiluted	Good
Aspergillus brasiliensis (niger)*	16404	<100	Growth
Candida albicans*	10231	<100	Growth
Candida albicans**	10231	<100	Growth

## **BBL™ Sabouraud Dextrose Broth (prepared)**

Inoculate and incubate Aspergillus at 20-25°C for 5 days. Inoculate Candida albicans in duplicate and incubate (\*) culture at 20-25°C and (\*\*) culture at 30-35°C for up to 5 days.

ORGANISM	ATCC™	INOCULUM CFU	RECOVERY
Aspergillus brasiliensis (niger)	16404	30-300	Growth
Candida albicans*	10231	10-100	Growth
Candida albicans**	10231	10-100	Growth

*M. lanosum* and *Trichophyton gypseum*.<sup>17</sup> Davidson and Dowding also used this medium in isolating *T. gypseum* from a case of tinea barbae.<sup>18</sup>

Sabouraud Dextrose Broth is used for culturing yeasts and molds in cosmetics. General Chapter <62> of the *USP* recommends the use of Sabouraud Dextrose Broth when isolating *Candida albicans* from nonsterile pharmaceutical products.

Sabouraud Maltose Broth is a modification of Sabouraud Dextrose Broth in which maltose is substituted for dextrose. It is selective due to its acid pH and is used for the detection of fungi.

Fluid Sabouraud Medium is employed in sterility test procedures for determining the presence of molds, yeasts and aciduric microorganisms. The acid reaction of the final medium is inhibitive to a large number of bacteria and makes the medium particularly well suited for cultivating fungi and acidophilic microorganisms.

## **Principles of the Procedure**

Sabouraud dextrose media are peptone media supplemented with dextrose to support the growth of fungi. Sabouraud agar is also available with maltose substituted for the dextrose. Peptones are sources of nitrogenous growth factors. The carbohydrate provides an energy source for the growth of microorganisms. Gentamicin is an aminoglycoside antibiotic that inhibits the growth of gram-negative bacteria. Chloramphenicol is inhibitory to a wide range of gram-negative and gram-positive bacteria, and cycloheximide is an antifungal agent that is primarily active against saprophytic fungi and does not inhibit yeasts or dermatophytes.<sup>19</sup>



Lecithin neutralizes quaternary ammonium compounds, and polysorbate 80 neutralizes substituted phenolic disinfectants. 10,20-22

For the Sterile Pack products, the entire double-bagged product is subjected to a sterilizing dose of gamma radiation, thus the contents inside the outer bag are sterile. This allows the inner bag to be aseptically removed and brought into an environmentally-controlled area without introducing contaminants. A third sterile bag is included as a transport device. Since the agar medium has been sterilized after packaging, the presence of microbial growth after sampling and incubation can be relied upon to represent the presence of environmental contaminants and not pre-existing microorganisms in the medium that may have been introduced during manufacture. The RODAC plates have a marked grid to facilitate counting organisms. The Sterile Pack Finger Dab Isolator plates are triple-bagged and are intended for sampling gloved hands.

## **Formulae**

## **Difco™ Sabouraud Dextrose Agar**

Approximate Formula* Per Liter Peptic Digest of Animal Tissue	g g g
BBL™ Sabouraud Dextrose Agar	
Approximate Formula* Per Liter Pancreatic Digest of Casein	g g g
Difco™ Sabouraud Dextrose Broth	
Approximate Formula* Per Liter           Peptic Digest of Animal Tissue	g g g
<b>Difco™ Fluid Sabouraud Medium</b>	
Approximate Formula* Per Liter Pancreatic Digest of Casein	g g g
Difco™ Sabouraud Maltose Agar	
Approximate Formula* Per Liter Enzymatic Digest of Casein	g g
Difco™ Sabouraud Maltose Broth	
Approximate Formula* Per Liter Peptic Digest of Casein	g g

# Directions for Preparation from Dehydrated Product

 Suspend/dissolve the powder in 1 L of purified water: Difco™ Sabouraud Dextrose Agar – 65 g; BBL™ Sabouraud Dextrose Agar – 65 g; Difco™ Sabouraud Dextrose Broth – 30 g; Difco<sup>™</sup> Fluid Sabouraud Medium – 30 g; Difco<sup>™</sup> Sabouraud Maltose Agar – 65 g; Difco<sup>™</sup> Sabouraud Maltose Broth – 50 g. Mix thoroughly.

- 2. Heat the agar media with frequent agitation and boil for 1 minute to completely dissolve the powder. Avoid overheating which could cause a softer medium.
- 3. Autoclave at 121°C for 15 minutes.
- 4. Test samples of the finished product for performance using stable, typical control cultures.

## **Sample Collection and Handling**

For clinical specimens, refer to laboratory procedures for details on specimen collection and handling.<sup>6-8</sup>

For cosmetic, food or environmental monitoring samples, follow appropriate standard methods for details on sample collection and preparation according to sample type and geographic location. 9-12

For pharmaceutical samples, refer to the *USP* for details on sample collection and preparation for testing of nonsterile products.<sup>1</sup>

## **Procedure**

For clinical specimens, refer to appropriate standard references for details on testing protocol to obtain isolated colonies from specimens using Sabouraud Dextrose Agar and Sabouraud Dextrose Broth.<sup>6-8</sup>

For cosmetic, food or environmental monitoring samples, refer to appropriate standard references for details on test methods using Sabouraud Dextrose Agar or Sabouraud Dextrose Broth. 9-12

For pharmaceutical samples, refer to *USP* General Chapters <61> and <62> for details on the examination of nonsterile products and performing microbial enumeration tests and the isolation of *Candida albicans* using Sabouraud Dextrose Agar and Sabouraud Dextrose Broth.<sup>1</sup>

For isolation of fungi from potentially contaminated specimens, a selective medium should be inoculated along with the nonselective medium. Incubate the containers at 25-30°C with increased humidity. All cultures should be examined at least weekly for fungal growth and should be held for 4-6 weeks before being reported as negative.

Liquefy the medium in pour tubes by heating in boiling water. Cool to 45-50°C and pour into sterile Petri dishes. Allow to solidify for a minimum of 30 minutes.

Prepared tubed slants primarily are intended for use with pure cultures for maintenance or other purposes. With prepared plates and Mycoflask™ bottles, streak the specimen as soon as possible after it is received in the laboratory, using a sterile inoculating loop to obtain isolated colonies. Consult appropriate references for information about the processing and inoculation of specimens.<sup>6-8</sup>



For the Sterile Pack media, sample selected surfaces by firmly pressing the agar medium against the test area. Hold the plate with thumb and second finger and use index finger to press plate bottom firmly against surface. Pressure should be the same for every sample. Do not move plate laterally as this spreads contaminants over the agar surface making resolution of colonies difficult. Slightly curved surfaces may be sampled with a rolling motion.

Areas (walls, floors, etc.) to be assayed may be divided into sections or grids and samples taken from specific points within the grid.

Incubate exposed plates at 35-37°C for 48 hours, and 25°C for 7 days or as required.

## **Expected Results**

After sufficient incubation, the containers should show isolated colonies in streaked areas and confluent growth in areas of heavy inoculation. Transfer of growth from slants to plated media may be required in order to obtain pure cultures of fungi.

Examine containers for fungal colonies exhibiting typical color and morphology.<sup>24</sup> Biochemical tests and serological procedures should be performed to confirm findings.

In the RODAC procedure, colonies are counted (fewer than 200 colonies for accurate counts) and expressed as either the number of colonies per RODAC plate or the number of colonies per cm. 5,10,11 Criteria for cleanliness of equipment and environment (surfaces) can be developed by using a database derived from repeated routine sampling of specific sites.<sup>25</sup>

Subculture colonies of interest so that positive identification can be made by means of biochemical testing and/or microscopic examination of organism smears.

## **Limitation of the Procedure**

Some fungi may be inhibited by the acidic pH of the medium and by the antimicrobics in the selective media.5-7

## **References**

- United States Pharmacopeial Convention, Inc. 2008. The United States pharmacopeia 31/The national
- United States Frantiacopeta of The Industrial Convenion, Inc. 2008. The United States pharmacopetal Part Inc., Rockville, Md.
   European Directorate for the Quality of Medicines and Healthcare. 2008. The European pharmacopoeia, 6th ed., Supp. 1, 4-1-2008, online. European Directorate for the Quality of Medicines and Healthcare, Council of Europea, 226 Avenue de Colmar BP907-, F-67029 Strasbourg Cedex 1, France.
- Japanese Ministry of Health, Labour and Welfare. 2006. The Japanese pharmacopoeia, 15th ed., online. Japanese Ministry of Health, Labour and Welfare.
- Sabouraud. 1892. Ann. Dermatol. Syphil. 3:1061.
   Ajello, Georg, Kaplan and Kaufman. 1963. CDC laboratory manual for medical mycology. PHS Publication No. 994, U.S. Government Printing Office, Washington, D.C.
   Murray, Baron, Jorgensen, Landry and Pfaller (ed.). 2007. Manual of clinical microbiology, 9th ed.
- American Society for Microbiology, Washington, D.C. Kwon-Chung and Bennett. 1992. Medical mycology. Lea & Febiger, Philadelphia, Pa.
- Kwoit-Chinig and Bennett. 1992. Niedical mycology. Lea & Peoiger, Finiadelpina, Fa.
   Isenberg and Garcia (ed.). 2004 (update, 2007). Clinical microbiology procedures handbook, 2nd ed. American Society for Microbiology, Washington, D.C.
   U.S. Food and Drug Administration. Bacteriological analytical manual, online. AOAC International, Gaithersburg, Md. cwww.cfsan.fda.gov/-ebam/bam-toc.html>
- Downes and Ito (ed.). 2001. Compendium of methods for the microbiological examination of foods, 4th ed. American Public Health Association, Washington, D.C.
- 4th ed. American Public Freaturi Association, washington, D.C.
  11. Health Canada. The compendium of analytical methods, online. Food Directorate, Health Products and food Branch, Health Canada, Ottawa, Ontario Canada.
  12. Wehr and Frank (ed.). 2004. Standard methods for the examination of dairy products, 17th ed. American Public Health Association, Mashington, D.C.
  13. Hall & Hartnett. 1964. Public Health Rep. 79:1021.

- 14. Vesley and Michaelson. 1964. Health Lab. Sci. 1:107
- 15. Prvor and McDuff. 1969. Exec. Housekeeper, March.
- 16. Dell. 1979. Pharm. Technol. 3: 47.
- 17. Davidson, Dowding and Buller. 1932. Can. J. Res. 6:1.

- 18. Davidson and Dowding, 1932. Arch. Dermatol. Syphilol. 26:660.
- Lorian (ed.). 2005. Antibiotics in laboratory medicine: making a difference, 5th ed. Lippincott Williams & Wilkins, Baltimore, Md.
- Quisno, Gibby and Foter. 1946. Am. J. Pharm. 118: 320.
   Erlandson and Lawrence. 1953. Science. 118: 274
- 22. Brummer. 1976. Appl. Environ. Microbiol. 32: 80.
- 23. Association for the Advancement of Medical Instrumentation. 2006. Sterilization of health care products radiation – Part 2: Establishing the sterilization dose. ANSI/AAMI/ISO 11137-2:2006. Association for the Advancement of Medical Instrumentation, Arlington, Va.
- 24. Larone. 1995. Medically important fungi: a guide to identification, 3rd ed. American Society for
- Microbiology, Washington, D.C.
  25. ICMSF. 2006. Microorganisms in foods 7. Intern. Comm. on Microbiol. Spec. for Foods. Kluwer Academic/Plenum Publishers, New York, N.Y.

## **Availability**

## **Difco™ Sabouraud Dextrose Agar**

BAM C	CAM CMI	PH2 COMPF EP JP MCM9 USP
Cat. No.	210940	Dehydrated – 100 g <sup>†</sup>
	210950	Dehydrated – 500 g <sup>†</sup>
	211661	Dehydrated – 2 kg <sup>†</sup>
	210930	Dehydrated – 10 kg <sup>†</sup>

BAM CCAM CMPH2 COMPF EP JP MCM9 USP

## BBL™ Sabouraud Dextrose Agar

DAW	CAIVI CIVII	TIZ COMIT EI 31 MCM3 OSI
Cat. No.	211584 211585	Dehydrated – 500 g $^{\dagger}$ Dehydrated – 5 lb (2.3 kg) $^{\dagger}$
United St	ates and Ca	anada
Cat. No.	221180 221278 221235 297739	Prepared Plates (Deep Fill) – Pkg. of 20*† Prepared Plates (Deep Fill) – Ctn. of 100*† Sterile Pack <b>RODAC</b> ™ Plates – Pkg. of 10* Prepared Plates (150 x 15 mm-style), Deep Fill – Pkg. of 24*
	221012	Prepared Slants (A Tubes) – Pkg. of 10*
	221013	Prepared Slants (A Tubes) – Ctn. of 100*
	297072	Prepared Slants (C Tubes) – Pkg. of 10*
	297479	Prepared Slants (C Tubes) – Ctn. of 100*
	297812	Prepared Pour Tubes, 20 mL – Pkg. of 10*
	296182	Prepared Pour Tubes, 20 mL – Ctn. of 100*
	221136	Mycoflask™ Bottles – Pkg. of 10*
	221137	Mycoflask™ Bottles – Ctn. of 100*
	297720	Transgrow-style Bottles – Ctn. of 100*
	295699	Prepared Bottles, 1 oz. – Ctn. of 100*
Europe		
Cat. No.	254039	Prepared Plates – Pkg. of 20*
	254083	Prepared Plates – Ctn. of 120*
Japan Cata Na	251100	Discount Distance Discout 20*
Cat. No.	251180	Prepared Plates – Pkg. of 20*

## BBL™ Sabouraud Dextrose Agar with Chloramphenicol

MCM9		
Cat. No.	221851	Prepared Plates (Deep Fill) – Pkg. of 20*
	221825	Prepared Slants (C Tubes) – Ctn. of 100*
	221314	Mycoflask™ Bottles – Pkg. of 10*
	221315	Mycoflask™ Bottles – Ctn. of 100*
	299098	Prepared Bottles, 500 mL – Pkg. of 10
Japan		
Cat. No.	251813	Prepared Plates (60 mm) – Ctn. of 240*
	251524	Prepared <b>RODAC</b> <sup>™</sup> Plates – Pkg. of 30*

## BBL™ Sabouraud Dextrose Agar with Chloramphenicol and Cycloheximide

297649 Prepared Slants – Pkg. of 10\*

### BBL™ Sabouraud Dextrose Agar with Chloramphenicol and Gentamicin

Cat. No. 296359 Prepared Plates – Pkg. of 20\*



## BBL™ Sabouraud Dextrose Agar with Lecithin and Polysorbate 80

Cat. No. 221233 Sterile Pack **RODAC**<sup>™</sup> Plates – Pkg. of 10\*
222244 Sterile Pack **RODAC**<sup>™</sup> SL Plates – Pkg. of 10\*
215224 Sterile Pack **RODAC**<sup>™</sup> SL Plates – Ctn. of 100\*
292653 Isolator Pack, **Finger Dab**<sup>™</sup> Prepared Plates
(100 × 15 mm-style) – Pkg. of 10\*
292654 Isolator Pack, **Finger Dab**<sup>™</sup> Prepared Plates
(150 × 15 mm-style) – Pkg. of 5\*

## **Difco™ Sabouraud Dextrose Broth**

## BAM EP JP USP

Cat. No.	238220	Dehydrated – 100 g <sup>†</sup>
	238230	Dehydrated - 500 g <sup>†</sup>
	238210	Dehydrated – 2 kg <sup>†</sup>

## **BBL™ Sabouraud Dextrose Broth**

## BAM EP JP USP

Cat. No. 215193 Prepared Bottles, 100 mL – Pkg. of 10<sup>+</sup>

## **Difco™ Fluid Sabouraud Medium**

Cat. No. 264210 Dehydrated - 500 g

## **Difco™ Sabouraud Maltose Agar**

Cat. No. 211020 Dehydrated – 500 g

## **Difco™ Sabouraud Maltose Broth**

Cat. No. 242910 Dehydrated – 500 g



<sup>\*</sup> Store at 2-8°C.

<sup>†</sup> QC testing performed according to USP/EP/JP performance specifications.