


HARMONIZED USP/EP/JP

■ **Bile-tolerant Gram-negative Bacteria**
EE Broth, Mossel (7603)

Formula / Liter

Desiccated Ox Bile	20 g
Enzymatic Digest of Gelatin	10 g
Sodium Phosphate, Dibasic	8 g
Dextrose	5 g
Potassium Phosphate, Monobasic ...	2 g
Brilliant Green	0.015 g
Final pH: 7.2 ± 0.2 at 25°C	

Directions

1. Suspend 45 g of the medium in one liter of purified water.
2. Heat at 100°C for 30 minutes to completely dissolve the medium.
3. Cool rapidly in cold water.
4. DO NOT AUTOCLAVE.

■ **Bile-tolerant Gram-negative Bacteria**
Violet Red Bile Glucose Agar (7425)

Formula / Liter

Enzymatic Digest of Gelatin	7.0 g
Yeast Extract	3.0 g
Dextrose	10.0 g
Bile Salts	1.5 g
Sodium Chloride	5.0 g
Neutral Red	0.03 g
Crystal Violet	0.002 g
Agar	*13.5 g
*10 -15 g according to gel strength	
Final pH: 7.4 ± 0.2 at 25°C	

Directions

1. Suspend 40 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. DO NOT AUTOCLAVE.
4. Cool to 45 - 50°C and dispense into sterile pour plates.

■ **Escherichia coli**
MacConkey Broth (7185)

Formula / Liter

Enzymatic Digest of Gelatin	20 g
Lactose	10 g
Oxbile	5 g
Bromcresol Purple	0.01 g
Final pH: 7.3 ± 0.2 at 25°C	

Directions

1. Dissolve 35 g of the medium in one liter of purified water.
2. Mix thoroughly.
3. Dispense into tubes containing Durham tubes.
4. Autoclave at 121°C for 15 minutes

■ **Escherichia coli**
MacConkey Agar (7102)

Formula / Liter

Enzymatic Digest of Gelatin	17 g
Enzymatic Digest of Casein	1.5 g
Enzymatic Digest of Animal Tissue	1.5 g
Lactose	10 g
Bile Salts Mixture	1.5 g
Sodium Chloride	5 g
Neutral Red	0.03 g
Crystal Violet	0.001 g
Agar	13.5 g
Final pH: 7.1 ± 0.2 at 25°C	

Directions

1. Suspend 50 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

■ **Salmonella spp.**
Rappaport-Vassiliadis Salmonella Enrichment Broth (7730)

Formula / Liter

Soy Peptone	4.5 g
Sodium Chloride	8.0 g
Potassium Phosphate, monobasic ...	0.60 g
Potassium Phosphate, dibasic	0.40 g
Magnesium Chloride, anhydrous*..	13.58 g
Malachite Green	0.036 g
Final pH: 5.2 ± 0.2 at 25°C	

Directions

1. Dissolve 27.2 g of the medium in one liter of purified water.
2. Mix thoroughly.
3. Dispense 10 mL into glass tubes, cap and autoclave at 115°C for 15 minutes.

■ **Salmonella spp.**
XLD Agar (7166)

Formula / Liter

Yeast Extract	3 g
Lactose	7.5 g
Sucrose	7.5 g
Xylose	3.5 g
L-Lysine	5 g
Ferric Ammonium Citrate	0.8 g
Phenol Red	0.08 g
Sodium Chloride	5 g
Sodium Deoxycholate	2.5 g
Sodium Thiosulfate	6.8 g
Agar	13.5 g
Final pH: 7.4 ± 0.2 at 25°C	

Directions

1. Suspend 55 g of the medium in one liter of purified water.
2. Heat with frequent agitation until the medium reaches the boiling point.
3. AVOID OVERHEATING. DO NOT AUTOCLAVE.

■ **Pseudomonas aeruginosa**
Cetrimide Agar
(Agar Medium N) (7688)

Formula / Liter

Enzymatic Digest of Gelatin	20 g
Magnesium Chloride	1.4 g
Potassium Sulfate	10 g
Cetrimide	0.3 g
Agar	13.6 g
Final pH 7.2 ± 0.2 at 25°C	

Directions

1. Suspend 45.3 g of the medium and 10 mL of glycerol in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

■ **Staphylococcus aureus**
Mannitol Salt Agar (7143)

Formula / Liter

Enzymatic Digest of Casein	5 g
Enzymatic Digest of Animal Tissue	5 g
Beef Extract	1 g
D-Manntol	10 g
Sodium Chloride	75 g
Phenol Red	0.025 g
Agar	15 g
Final pH: 7.4 ± 0.2 at 25°C	

Directions

1. Suspend 111 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

■ **Clostridia**
Reinforced Clostridial Medium
(7714)

Formula / Liter

Beef Extract	10 g
Peptone	10 g
Sodium Chloride	5 g
Dextrose	5 g
Yeast Extract	3 g
Sodium Acetate	3 g
Soluble Starch	1 g
L-Cysteine HCl	0.5 g
Agar	0.5 g
Final pH: 6.8 ± 0.2 at 25°C	

Directions

1. Suspend 52 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

■ **Clostridia**
Columbia Agar (7734)

Formula / Liter

Pancreatic Digest of Casein 10 g
Meat Peptic Digest 5 g
Heart Pancreatic Digest 3 g
Yeast Extract 5 g
Maize Starch 1 g
Sodium Chloride 5 g
Agar 12 g
Final pH: 7.3 ± 0.2 at 25°C

Directions

1. Dissolve 41 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

■ **Candida albicans**
Sabouraud Dextrose Broth (7617)

Formula / Liter

Enzymatic Digest of Casein 5 g
Enzymatic Digest of Animal Tissue 5 g
Dextrose 20 g
Final pH: 5.6 ± 0.2 at 25°C

Directions

1. Dissolve 30 g of the medium in one liter of purified water.
2. Mix thoroughly.
3. Autoclave at 121°C for 15 minutes.

■ **Candida albicans**
Sabouraud Dextrose Agar (7150)

Formula / Liter

Enzymatic Digest of Casein 5 g
Enzymatic Digest of Animal Tissue 5 g
Dextrose 40 g
Agar 15 g
Final pH: 5.6 ± 0.2 at 25°C

Directions

1. Suspend 65 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

■ **Candida albicans**
Potato Dextrose Agar (7149)

Formula / Liter

Potato Infusion from 200 g 4 g*
Dextrose 20 g
Agar 15 g
*4.0 g of potato extract is equivalent to 200 g of infusion from potatoes.
Final pH: 5.6 ± 0.2 at 25°C

Directions

1. Suspend 39 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

■ **Microbial Enumeration**
Tryptic Soy Agar (7100)

Formula / Liter

Enzymatic Digest of Casein 15 g
Enzymatic Digest of Soybean Meal 5 g
Sodium Chloride 5 g
Agar 15 g
Final pH: 7.3 ± 0.2 at 25°C

Directions

1. Suspend 40 g of the medium in one liter of purified water.
2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.
4. Optional: Prepare 5 to 10% blood agar by adding appropriate volume of sterile defibrinated blood to melted sterile agar medium, cooled to 45 – 50°C.

■ **Sterility**
Tryptic Soy Broth (7164)

Formula / Liter

Enzymatic Digest of Casein 17.0 g
Enzymatic Digest of Soybean Meal 3.0 g
Sodium Chloride 5.0 g
Dipotassium Phosphate 2.5 g
Dextrose 2.5 g
Final pH: 7.3 ± 0.2 at 25°C

Directions

1. Dissolve 30 g of the medium in one liter of purified water.
2. Mix thoroughly.
3. Autoclave at 121°C for 15 minutes.

■ **Sterility**
Fluid Thioglycollate Medium
(7137)

Formula / Liter

Enzymatic Digest of Casein 15 g
Yeast Extract 5 g
Dextrose 5.5 g
L-Cystine 0.5 g
Sodium Chloride 2.5 g
Sodium Thioglycollate 0.5 g
Resazurin 0.001 g
Agar 0.75 g
Final pH: 7.1 ± 0.2 at 25°C

Directions

1. Dissolve 29.8 g of the medium in one liter of purified water.
2. Heat with frequent agitation to completely dissolve the medium.
3. Autoclave at 121°C for 15 minutes.

■ **Diluent**
Buffered Sodium Chloride –
Peptone Solution, pH 7.0 (7732)

Formula / Liter

Potassium Phosphate, dibasic 3.6 g
Sodium Phosphate, monobasic* 5.8 g
Sodium Chloride 4.3 g
Enzymatic Digest of Casein 1.0 g
* Anhydrous
Final pH: 7.0 ± 0.2 at 25°C

Directions

1. Dissolve 14.7 g of the medium in one liter of purified water.
2. Mix thoroughly.
3. Autoclave at 121°C for 15 minutes.

