# Culture Media Ingredients Peptone and Yeast Extract

Synthesis of proteins and nucleic acids by microorganisms and cells requires nitrogen sources. **SRL** Peptones and Yeast extracts are one of the best sources of organic nitrogen. They provide

- Excellent media consistency & solubility in water
- Balanced composition of essential amino acids and peptones
- Excellent microbiological characteristics
- Excellent performance in growth of large range of microorganisms, fastidious and non-fastidious
- High yield of protein production by recombinant cells
- High yield of metabolite production

## 95292

#### Peptone BactoBio for bacteriology (Peptic digest of animal tissue)

500g, 5kg, 25kg and bulk packing on request

Peptone is manufactured by controlled enzymatic hydrolysis of animal tissues. It is used as an organic nitrogen source in microbiological culture media for cultivation of a variety of bacteria and fungi. All the raw materials used in the manufacturing process are of Indian origin, where no TSE/BSE has been reported.

		5196
Description	Light to medium tan, free flowing, homogeneous powder	
Solubility (2.0% solution)	Light to medium amber, clear	
Final pH at 25°C	7.0 ± 0.5 (2%)	1
Stability after autoclaving	Light to medium amber, clear	
Loss on Drying	< 5.0%	
Total Nitrogen	11.5 – 15.5%	10 A
Total Aerobic Microbial Count	< 10,000 cfu/gm	
Growth Promoting Properties	Good	





34266

## Yeast Extract BactoBio for bacteriology

100g, 500g, 5kg, 10kg and bulk packing on request

Yeast extract is a spray dried extract made from baker's yeast – (Saccharomyces cerevisiae); which is specifically made of yeast for cell nutrition purposes.

It is an excellent source of soluble proteins, amino acids, vitamins, nucleotides and essential elements and provides multi-functional nutritional supplements in various cell culture applications. It is also widely used in microbial fermentations.

Yeast extract added in LB Media is extensively used in recombinant DNA work and other molecular biology procedures and applications.

Description	Brownish yellow, free flowing, homogeneous powder	
Solubility	Medium amber to yellowish brown, clear	
pH at 25°C	7.0 ± 0.5 (2%)	
Stability after autoclaving	Medium amber to yellowish brown, clear	
Loss on Drying	< 5.0%	
Total Nitrogen	9.0 – 11.0 %	
Total Aerobic Microbial Count	< 10,000 cfu/gm	
Growth Promoting Properties	Good	

We also offer 89463 Yeast Extract for bacteriology



## **Nutrient and MacConkey Agar**

## 63971

## **Nutrient Agar**

100g, 500g and bulk packing on request

This relatively simple medium contains Peptone, Beef extract and Yeast extract which provides carbon, nitrogen and vitamin sources for growth requirements of microorganisms. Sodium chloride maintains the osmotic balance. Agar is used as a solidifying agent.

Composition	grams/litre
Peptone	5.00
Yeast extract	2.00
Beef extract	1.00
Sodium chloride	5.00
Agar	15.00
pH at 25°C	7.4 ± 0.2



#### We also offer

Nutrient Agar BioVeg
Nutrient Agar (I)
Nutrient Agar 1.5% (I)
Nutrient Agar 1.5%
Nutrient Agar for Oxidase (I)
Nutrient Agar w/ Manganese
Nutrient Agar w/MUG
Nutrient Agar w/ 1% Peptone
Nutrient Agar No. 2 (B/S)
Nutrient Agar No. 2
Nutrient Agar, pH 6.8
Nutrient Agar, pH 7.0 (I)
Nutrient Agar, pH 7.0 (B/S)
Nutrient Agar pH 6 w/ 0.8 % NaCl

Nutrient Agar provides excellent growth promoting properties, quick solubility and excellent gel strength.

## 76875

## **MacConkey Agar**

100g, 500g and bulk packing on request

Peptic Digest of animal tissue and Proteose Peptone provide nitrogen and other nutrients. Bile salts and Crystal violet are inhibitory agents for gram positive organisms. Lactose utilizing bacteria produce acid which lowers the pH of the medium below 6.8 and results in appearance of red/pink colonies.

Non lactose fermenting bacteria cannot utilize lactose and will use peptone instead, this forms ammonia which raises the pH of the medium and leads to formation of colourless colonies.

Composition	grams/litre	
Peptone	17.00	10
Proteose peptone	3.00	1.0
Bile salts	1.50	
Lactose	10.00	
Sodium chloride	5.00	5°
Neutral Red	0.03	
Crystal Violet	0.001	3
Agar	13.50	
pH at 25°C	7.1 ± 0.2	

MacConkey Agar gives excellent colony characteristics and differentiation, quick solubility and excellent gel strength.



- 96871 MacConkey Agar BioVeg
- 37775 MacConkey Agar, Harmonized
- 80302 MacConkey Agar w/ MUG
- 71117 MacConkey Agar (B/S)
- 83870 MacConkey Agar, Base
- 26823 MacConkey Agar Medium
- 95199 MacConkey Agar, Modified
- 98384 MacConkey Agar w/ Bromothymol Blue
- 58370 MacConkey Agar w/ 0.15% Bile salts, C.V. and NaCI (U/P)
- 33759 MacConkey Agar w/o C.V., w/ 1.2% Agar
- 50372 MacConkey Agar w/o C.V., NaCl w/ 0.5%
- Sodium Taurocholate
- 79447 MacConkey Agar w/o C.V. w/ 0.15% Bile Salts
- 64300 MacConkey Agar w/o C.V. w/ 0.5% Bile Salts 64024 MacConkey Agar w/o C.V., NaCl, w/ 0.0075%
- NR, 1.2% Agar BioVeg
- 64030 MacConkey Agar w/o C.V., NaCl w/ 0.5% Bile Salts
- 72074 MacConkey Agar No. 3
- 98664 MacConkey Sorbitol Agar (Sorbitol Agar)
- 57340 MacConkey Sorbitol Agar, Base (I)



## Culture Media for Biotechnology and

## **Industrial applications**

Applications of microbiology is creating new industrial revolution. Pharmaceuticals, cosmetics, molecular biology, hospitals, research institutions and so on...

the applications in industries where dehydrated culture media products are used are varied and many. Microbial species which have potential for industrial application are continually being sought. To aid the industrial microbiologist various culture media products are available.

Few media used in these industries are -

## 33291 Soyabean Casein Digest Agar

100g, 500g, 2kg and bulk packing on request

Composition	grams/litre
Pancreatic digest of casein	15.00
Papaic digest of soyabean meal	15.00
Sodium Chloride	5.00
Agar	15.00

is used for isolation and cultivation of fastidious and non-fastidious microorganisms.

## 63971 Nutrient Agar

100g, 50	00g and bulk packing on reque
Composition	grams/litre
Agar	15.00
Peptone	2.00
Sodium Chloride	5.00
Yeast extract	2.00
Beef extract	1.00

is used for the cultivation and maintenance of a wide variety of microorganisms.

28501

## **)1 Soyabean Casein Digest Medium**

100g, 500g, 2kg and bulk packing on request

Composition	grams/litre
Enzymatic digest of casein	17.00
Papaic digest of soyabean meal	3.00
Glucose	2.50
Dipotassium phosphate	2.50
Sodium chloride	5.00

is used for growth of wide variety of bacteria and fungi.

#### All media are formulated to yield higher and better qualitative and quantitative results.

In BioTechnology, achieving accurate, reproducible and repeatable microbiological test results is of utmost importance. This depends upon the quality of microbiological media used.

SRL understands this critical requirement and hence maintains batch consistency to yield reproducible results.

### **Sterility Testing**

52023	Alternative Thioglycollate Medium, (I/P) (U/P)
33355	Brewer Thioglycollate Medium
93023	Fluid Thioglycollate Medium, Clear (U/P)
42917	Fluid Thioglycollate Medium, (U/P) (I/P)
46990	Fluid Thioglycollate Medium, Harmonized
35979	Soyabean Casen Digest Agar (U/P) (I/P)
77892	Soyabean Casen Digest Agar, <i>Harmonized</i>
33291	Soyabean Casen Digest Agar
10935	Soyabean Casen Digest Medium, Harmonized
28501	Soyabean Casen Digest Medium
91690	Thioglycollate Medium w/o Indicator
24392	Tryptone Soya Broth



Bacillus subtilis on Luria Bertani Agar

4593	Luria Bertani Broth, Lenno			
		100g, 50	0g, 2kg and bulk	
Composition		grams/litre		
Tryptone		10.00		
Yeast extract		5.00		
Sodium Chloride		5.00		

Few Broth media used in these industries are

#### Luria Bertani Broth, Miller 29817

100g, 500g, 2kg and bulk packing on request

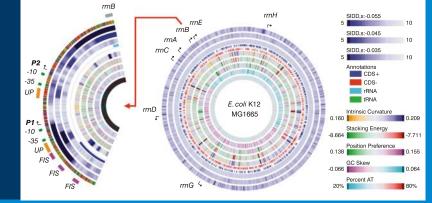
Х

packing on request

Composition	grams/litre
Tryptone	10.00
Yeast extract	5.00
Sodium Chloride	10.00

14593 and 29817 are used for maintaining and propagating Escherichia coli in molecular microbiology procedures.

The dissolution of media, especially broth media, is such that it quickly dissolves in water, thus providing increased solubility.



Genome Atlas of E. coli K-12, the most routinely used strain in molecular biology

#### Few Fungal media used in these industries are —

#### **Potato Dextrose Broth** 35208

		100	g, 500g and bulk packing on request
Composition	grams/litre		
Potatoes infusion from	200.00		
Dextrose	20.00		

#### **Potato Dextrose Agar** 71788

100g, 500g, 2kg,, 5kg and bulk packing on request

Composition	grams/litre
Potatoes infusion from	200.00
Dextrose	20.00
Agar	15.00

35208 and 71788 are used for cultivation and isolation of fungal organisms.

#### It gives enhanced sporulation in many fungi.

Aspergillus sps.

Please contact:





### **Molecular Biology**

46502	Luria Bertani Agar, Lennox
47436	Luria Bertani Agar, Miller
14593	Luria Bertani Broth, Lennox
29817	Luria Bertani Broth, Miller
97970	Luria Bertani Agar w/o Sodium Chloride
22006	Luria Bertani Broth w/o Sodium Chloride (LB Growth Medium w/o Sodium Chloride)
40826	Luria Bertani Agar, Miller BioVe
17320	Luria Bertani Broth, Miller BioVeg
30086	Terrific Broth
68957	M9CA Medium
23184	M9 Minimal Salts 5 $ imes$
E 10E0	Vanat Dantana Davtrana Agar

- 54250 Yeast Peptone Dextrose Agar
- 66995 YPD Broth

www.srlchem.com