



INDUSTRIAL BIOPROCESSES

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Condalab

Inspired by knowledge

The First Spanish Manufacturer

Condalab is a benchmark trademark thanks to our **more than 60 years** of manufacturing experience. We attained this market position by developing these high-quality raw materials, which are at your disposal: **peptones, extracts or agars**.

Our microbiology catalog is supplemented with products specialized in molecular biology to offer a **global solution** to any industrial biotechnology process and R&D project.

A Brief History of Bioprocesses

A bioprocess has two essential components, bio and process. The bio element is obtained from **biotechnological innovations**, which currently involve the production of a wide variety of biotechnological products such as recombinant proteins, including: enzymes for industrial uses, biopharmaceuticals and antibodies for advanced therapies.

On the other hand, the process element involves turning this **biotechnological discovery** into the development of a practical method.

Thus, a bioprocess can be understood as the use of living cells, or their components, to obtain a high-technology product.

Wine and cheese making.
Use of yeast for baking and brewing beer



10,000
a.e.c

A. Van Leeuwenhoek invented
the microscope and spotted
yeast cells in fermented beer



1700s



The Aztec civilization
cultivates algae for food

0 e.c

First designs and scale-ups
of aerated bioreactors



1950s



Jenner validates the ability
to confer resistance. The first
vaccination in Europe

1800s

Field test and launch of the
first genetically modified plant



1986



Human insulin: the first
genetically modified
product

1982

Cancer genome sequencing
for customized medications



2008



Human genome
project completed

2003

First transplant of an
artificially-harvested organ
in a patient



2011



J. C. Venter creates
'synthetic life'

2010



Complete human X
chromosome, telomere-
to-telomere

2020

How is a Bioprocess Developed?

It starts with the choice of the expression system (**producer cells**). The most widely used are bacteria, fungi, yeast and animal cells that replicate in large quantities.

The cells are first reactivated in a **starter culture** that is then transferred until reaching the number of cells required for inoculation into the bioreactor. During **cell expansion**, they are maintained in a state of rapid growth.

The product can be developed during or after the expansion stage. To promote the **production stage**, inductors are added or culture conditions are modified to extend cell viability and productivity.

Once the bioprocess is finished, the stage for **product recovery** begins and additional modifications are often made to obtain the end product.

BIOPROCESS FLOW CHART



1.

The **upstream processing** includes the **choice, design and preparation** of the culture medium, raw material **sterilization** and **inoculum preparation**.

2.

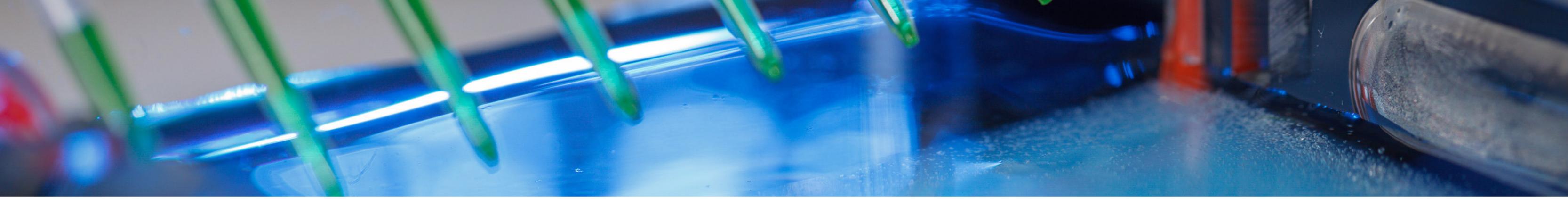
The **bioreactor** includes the **filling and transfer** of the materials, **agitation and aeration, heat transfer operations, foam and pH control**.

3.

In the **downstream processing**, the required purity of the product must be defined. The first stage is usually **recovery**, which includes the separation of biomass from the fermentation broth. The following steps are **purification and product finish**.

Condalab's solutions for your bioprocess





Research & Development.

Any bioprocess emerges from scientific discoveries, as was the case with the use of **fermentation processes** to obtain chemical compounds, including the first production of penicillin. However, nowadays, **recombinant DNA (rDNA)** technology and other advances have been used to produce a new generation of biotechnology products, such as recombinant proteins: like enzymes for industrial uses, biopharmaceuticals and antibodies for advanced therapies.

Condalab has available **various agaroses** with different characteristics and applications, **specialized culture media** for cell recovery, selection of competent cells, growth or expression enhancers and **selection antibiotics**.

Molecular Biology Media

CAT.	PRODUCT	PACK SIZE
1167	2xYT Agar	500 g
1507	2xYT Medium	500 g
2093	2YT Autoinducible Growth Medium w/o Trace Elements	500 g
2113	2YT Autoinducible with Trace Elements	500 g
2095	AIM -Super Growth w/o Trace Element	500 g
1540	Induction Base Medium	500 g
1083	LB Agar (Lennox)	500 g
2084	LB Agar (Lennox) with Ampicilin 100 µg/ml	500 g
2090	LB Agar with Kanamycin 50µg/ml (Lennox)	500 g
1231	LB Broth (Lennox)	500 g
2094	LB Broth Autoinducible w/o Trace Element	500 g
2114	LB Broth Autoinducible with Trace Element	500 g
1552	Luria Agar (Miller's LB Agar)	500 g
1308	Luria Agar (Miller's Modification)	500 g
2085	Luria Agar with Ampicillin 100 µg/ml (Miller's LB Agar)	500 g

Molecular Biology Media

CAT.	PRODUCT	PACK SIZE
2086	Luria Agar with Ampicillin 50 µg/ml (Miller's LB Agar)	500 g
2092	Luria Agar with Chloramphenicol 34 µg/ml (Miller's LB Agar)	500 g
2091	Luria Agar with Kanamycin 50µg/ml (Miller's LB agar)	500 g
1551	Luria Broth (Miller's LB Broth)	500 g
1266	Luria Broth (Miller's Modification)	500 g
1549	NZCYM Broth	500 g
1542	RM Agar Base	500 g
1538	RM Base Medium	500 g
1432	sLB Agar	500 g
1163	sLB Broth	500 g
1199	sLB Broth (Buffered)	500 g
1541	SOB Medium	500 g
2019	SOC Medium	500 g
2112	Super Growth Autoinducible with Trace Elements	500 g
1246	Terrific Broth	500 g
1499	Terrific Broth (Non animal origin)	500 g
2072	Terrific Broth Base Autoinducible w/o Metals	500 g
2111	Terrific Broth Base Autoinducible with Trace Element	500 g
2039	Vegetable LB Agar (Lennox)	500 g
2038	Vegetable LB Broth (Lennox)	500 g
1553	Yeast Nitrogen Base w/o Added Aminoacids and w/o Ammonium Sulfate	500 g
1545	Yeast Nitrogen Base w/o Amino Acids	500 g
1513	YP Agar Base Medium	500 g
1511	YP Base Medium	500 g
1546	YPD Agar	500 g
1547	YPD Broth	500 g

Agaroses

CAT.	PRODUCT	PACK SIZE
8024	Agarose D1 High EEO	100 g and 500 g
8010	Agarose D1 Low EEO	100 g and 500 g
8017	Agarose D1 Low EEO GQT	100 g and 500 g
8019	Agarose D1 Medium EEO	100 g and 500 g
8032	Agarose D2	100 g and 500 g
8045	Agarose D5	100 g and 500 g
8100	Agarose E	100 g and 500 g
8090	Agarose FP DNA	100 g and 500 g
8050	Agarose LM	100 g and 500 g
8091	Agarose LM GQT	100 g and 500 g
8092	Agarose LM Sieve	100 g and 500 g
8067	Agarose MS - 12	100 g and 500 g
8075	Agarose MS - 4	100 g and 500 g
8001	Agarose MS - 6 Metagel	100 g and 500 g
8065	Agarose MS - 8	100 g and 500 g
8093	Agarose NovaGel GQT	100 g and 500 g

Selection Antibiotics

CAT.	PRODUCT	PACK SIZE
6800	Ampicillin (Sodium Salt)	5 g
6801	Ampicillin (Sodium Salt)	25 g
6803	Carbenicillin Disodium	5 g
6804	Chloramphenicol	25 g
6805	Gentamicin	5 g
6806	Kanamycin (Monosulphate)	5 g
6807	Kanamycin (Monosulphate)	25 g
6809	Rifampicin	1 g
6810	Tetracycline (Hydrochloride)	25 g



Production.

Multiple factors have an impact on the success of a bioprocess, however, a key factor is undoubtedly the **nutritional value** of the culture medium for cell development. Incorporating adequate nitrogen compound dosing and carbohydrates can have a **positive impact** on yield.

Condalab has peptones of different origins, extracts and other products with high nutritional value that have been produced with **the highest quality standards** and can help you obtain the best possible yields in your process, as well as a highly reproducible method.

Bacterial Culture

CAT.	PRODUCT	PACK SIZE
1604	Acid Casein Peptone	500 g and 5 kg
1704	Bacteriological Gelatin	500 g and 5 kg
1710	Bacteriological Ox Bile	500 g and 5 kg
1616	Bacteriological Peptone	500 g and 5 kg
1700	Beef Extract	500 g and 5 kg
1706	Bile Salts N°3	500 g and 5 kg
1714	Bovine Heart Infusion	500 g and 5 kg
1603	Casein CC Peptone	500 g and 5 kg
1602	Casein Peptone	500 g and 5 kg
1635	Casein Peptone HALAL	500 g and 5 kg
1606	Gelatin Peptone	500 g and 5 kg

CAT.	PRODUCT	PACK SIZE
1626	Lactoalbumin Hydrolysate	500 g and 5 kg
1703	Liver Peptone	500 g and 5 kg
1708	Malt Extract	500 g and 5 kg
1600	Meat Peptone	500 g and 5 kg
1628	Peptonized Milk	500 g and 5 kg
1610	Polypeptone	500 g and 5 kg
1712	Pork Brain Heart Infusion	500 g and 5 kg
1716	Pork Heart Infusion	500 g and 5 kg
1624	Pork Meat Peptone	500 g and 5 kg
1609	Proteose peptone	500 g and 5 kg
1607	Proteose Peptone N°3	500 g and 5 kg
1615	Soy Peptone GMO-Free and Animal-Free	500 g and 5 kg
1612	Tryptone	500 g and 5 kg
1614	Tryptose	500 g and 5 kg
1702	Yeast extract	500 g and 5 kg
1721	Yeast Extract Bioprocess Grade	500 g and 5 kg

Cell Culture

CAT.	PRODUCT	PACK SIZE
1636	Condalow® Casein Peptone	25 kg
1618	Condalow® Soy Peptone	25 kg
1637	Condalow® Meat Peptone	25 kg
1638	Condalow® Wheat Peptone	25 kg
1626	Lactoalbumin Hydrolysate	500 g



Quality Control.

Ensuring the quality and safety of the final products of a bioprocess is fundamental, as it can jeopardize both the efforts made during production and industrial scale-up operations. To this end, relevant methods of analysis need to be established in order to certify **product safety**.

Condalab offers all the necessary media to carry out the **microbiological analysis** of sterile and non-sterile products, as well as for production water control. Our products are formulated and validated according to the **Eur. Ph., USP or ISO international standards**.

Sterile Product Analysis

CAT.	PRODUCT	PACK SIZE
5128	Thioglycollate Fluid Medium EP/USP	10 x 100 ml Flask
5183	Thioglycollate Fluid Medium EP/USP	10 x 200 ml Flask
1508	Thioglycollate Fluid Medium EP/USP	500 g
4004	Thyoglicollate Fluid Medium EP/USP	20 Tubes
4019	Trypticasein Soy Broth (TSB) EP/USP	20 Tubes
4657	Trypticasein Soy Broth (TSB) EP/USP	10 x 90 ml Flask
5119	Trypticasein Soy Broth (TSB) EP/USP	10 x 100 ml Flask
5070	Trypticasein Soy Broth (TSB) EP/USP	10 x 200 ml Flask
1224	Trypticasein Soy Broth (TSB) EP/USP	500 g

Non-Sterile Product Analysis

CAT.	PRODUCT	PACK SIZE
5154	Buffered Peptone Water 0,1% EP/USP	10 x 200 ml Flask
5180	Buffered Peptone Water 0,1% EP/USP	10 x 100 ml Flask
4035	Buffered Peptone Water 0,1% EP/USP	20 Tubes
4037	Buffered Peptone Water 0,1% EP/USP	20 Tubes
4638	Buffered Peptone Water 0,1% EP/USP	10 x 90 ml Flask
4643	Buffered Peptone Water EP/USP	10 x 90 ml Flask
1401	Buffered Peptone Water EP/USP	500 g
1102	Cetrimide Agar Base EP/USP	500 g
916	Cetrimide Agar EP/USP	20 Plates
5122	Cetrimide Agar EP/USP	10 x 100 ml Flask
1104	Columbia Agar Base EP/USP	500 g
931	Columbia with 5% Sheep Blood Agar	20 Plates
907	Dextrose Sabouraud Agar EP/USP	20 Plates
900	MacConkey Agar EP/USP	20 Plates
5003	MacConkey Agar EP/USP	10 x 100 ml Flask
1052	MacConkey Agar EP/USP	500 g
4047	MacConkey Broth EP/USP	20 Tubes
5146	MacConkey Broth EP/USP	10 x 100 ml Flask
1210	MacConkey Broth EP/USP	500 g
1062	Mannitol Salt Agar (MSA) (Chapman Medium) EP/USP	500 g
917	Mannitol Salt Agar (MSA) (Chapman Medium) EP/USP	20 Plates
5104	Mannitol Salt Agar (MSA) (Chapman Medium) EP/USP	10 x 100 ml Flask
4043	Mossel EE Broth EP/USP	20 Tubes
5168	Mossel EE Broth EP/USP	10 x 100 ml Flask
1202	Mossel EE Broth EP/USP	500 g

CAT.	PRODUCT	PACK SIZE
849	Potato Dextrose Agar EP/USP	20 Plates
1022	Potato Dextrose Agar EP/USP	500 g
4016	Rappaport Vassiliadis Broth EP/USP	20 Tubes
5187	Rappaport Vassiliadis Broth EP/USP	10 x 90 ml Flask
1414	Rappaport Vassiliadis Broth EP/USP	500 g
1007	Reinforced Clostridial Medium EP/USP	500 g
4214	Sabouraud Dextrose Agar EP/USP	20 Tubes
5107	Sabouraud Dextrose Agar EP/USP	10 x 100 ml Flask
5143	Sabouraud Dextrose Agar EP/USP	10 x 200 ml Flask
1024	Sabouraud Dextrose Agar EP/USP	500 g
4115	Sabouraud Dextrose Broth EP/USP	20 Tubes
4656	Sabouraud Dextrose Broth EP/USP	10 x 100 ml Flask
1205	Sabouraud Dextrose Broth EP/USP	500 g
4003	Trypticasein Soy Agar (TSA) EP/USP	20 Tubes
904	Trypticasein Soy Agar (TSA) EP/USP	20 Plates
5000	Trypticasein Soy Agar (TSA) EP/USP	10 x 100 ml Flask
5157	Trypticasein Soy Agar (TSA) EP/USP	10 x 200 ml Flask
1068	Trypticasein Soy Agar (TSA) EP/USP	500 g
1224	Trypticasein Soy Broth (TSB) EP/USP	500 g
911	Violet Red Bile Agar With Glucose (VRBG) EP/USP	20 Plates
5158	Violet Red Bile Agar With Glucose (VRBG) EP/USP	10 x 100 ml Flask
4670	Violet Red Bile Agar With Glucose (VRBG) EP/USP	10 x 200 ml Flask
1092	Violet Red Bile Agar With Glucose (VRBG) EP/USP	500 g
930	XLD Agar (Xylose Lysine Desoxycholate Agar) EP/USP	20 Plates
1080	XLD Agar (Xylose Lysine Desoxycholate Agar) EP/USP	500 g



Monitoring.

Guaranteeing the quality of the bioprocess does not only include the stages of production and control of the end product, but also the environment where it is developed. To do this, **a sampling and environmental monitoring plan** must be established, including production, storage and water tank areas and any critical aspect of the process. Environmental control increases the yield of the bioprocess, besides avoiding possible end product contamination.

Condalab offers a wide range of products for the **microbiological control** of surfaces or handlers, clean rooms, process waters, among others.

Clean room

CAT.	PRODUCT	PACK SIZE
908	Sabouraud Dextrose Agar with Chloramphenicol EP/USP/ISO	20 Plates
4528	Sabouraud Dextrose Agar with Chloramphenicol	24 Rodac Plates
843	Sabouraud Chloramphenicol Dextrose Agar. Double Wrapped. Irradiated EP/USP/ISO	20 Plates
842	Sabouraud Chloramphenicol Dextrose Agar. Triple Wrapped. Irradiated. EP/USP/ISO	20 Plates
4544	Sabouraud Dextrose Agar with Chloramphenicol EP/USP/ISO. Triple Wrapped. Irradiated ISO	30 Rodac Plates
838	Sabouraud TLHTh Agar. EP/USP Double Wrapp. Irradiated	30 Rodac Plates
4545	Sabouraud Dextrose Agar with Neutralizings. Double Wrapped. Irradiated	20 Plates

CAT.	PRODUCT	PACK SIZE
4546	Dextrose Sabouraud Agar with Neutralizings. Triple Wrapped. Irradiated	24 Rodac Plates
907	Dextrose Sabouraud Agar EP/USP	20 Plates
4522	Sabouraud Dextrose Agar EP/USP/ISO	30 Rodac Plates
841	Sabouraud Dextrose Agar. Double Wrapped. Irradiated EP/USP/ISO	20 Plates
4542	Sabouraud Dextrose Agar. Triple Wrapped. Irradiated EP/USP/ISO	24 Rodac Plates
4520	Trypticasein Soy Agar (TSA) EP/USP/ISO	30 Rodac Plates
840	Tryptone Soya Agar (TSA) with Neutralizings. Double Wrapped. Irradiated	20 Plates
4534	Trypticasein Soy Agar (TSA) with Neutralizings. Triple Wrapped. Irradiated	24 Rodac Plates
904	Trypticasein Soy Agar (TSA) EP/USP/ISO	20 Plates
836	Trypticasein Soy Agar (TSA) EP/USP/ISO. Doble wrapped. Irradiated	20 Plates
839	Trypticasein Soy Agar (TSA) EP/USP/ISO. Triple Wrapped. Irradiated	20 Plates
837	TSA TLHTh. (Trypticasein Soy Agar) EP/USP Triple Wrapped Irradiated	20 Plates
4533	Trypticasein Soy Agar (TSA) EP/USP/ISO. Triple Wrapped. Irradiated	24 Rodac Plates
4538	Trypticasein Soy Agar (TSA) with Neutralizings. Double Wrapped. Irradiated	30 Rodac Plates

Air and Surface Analysis

CAT.	PRODUCT	PACK SIZE
4529	Rose Bengal Agar with Chloramphenicol	30 Rodac Plates
4530	Baird-Parker Agar ISO	30 Rodac Plates
4532	Violet Red Bile Lactose Agar (VRBL) ISO	24 Rodac Plates
4533	Trypticasein Soy Agar (TSA) EP/USP/ISO. Triple Wrapped. Irradiated	30 Rodac Plates
4534	Trypticasein Soy Agar (TSA) with Neutralizings. Triple Wrapped. Irradiated	30 Rodac Plates
4538	Trypticasein Soy Agar (TSA) with Neutralizings. Double Wrapped. Irradiated	30 Rodac Plates
4524	Violet Red Bile Agar With Glucose (VRBG) EP/USP/ISO	24 Rodac Plates
4527	Cetrimide Agar	30 Rodac Plates
4528	Sabouraud Dextrose Agar with Chloramphenicol	24 Rodac Plates
4544	Sabouraud Dextrose Agar with Chloramphenicol EP/USP/ISO. Triple Wrapped. Irradiated ISO	30 Rodac Plates
4545	Sabouraud Dextrose Agar with Neutralizings. Double Wrapped. Irradiated.	30 Rodac Plates
4546	Dextrose Sabouraud Agar with Neutralings. Triple Wrapped. Irradiated	24 Rodac Plates
4522	Sabouraud Dextrose Agar EP/USP/ISO	30 Rodac Plates
4542	Sabouraud Dextrose Agar. Triple Wrapped. Irradiated EP/USP/ISO	24 Rodac Plates
4523	MacConkey Agar EP/USP/ISO	30 Rodac Plates
4521	Standard Methods Agar (PCA)	30 Rodac Plates
4526	Mannitol Salt Agar (MSA) (Chapman Medium) EP/USP/ISO	30 Rodac Plates
4520	Trypticasein Soy Agar (TSA) EP/USP/ISO	30 Water Plates
4533	Trypticasein Soy Agar (TSA) EP/USP/ISO. Triple Wrapped. Irradiated	30 Water Plates
4525	TSA Lethen Agar (Irradiated)	30 Water Plates
4561	TSA with Penase with Lecithin with Polisorbate	30 Water Plates

Water Analysis

CAT.	PRODUCT	PACK SIZE
4701	Bile Esculin Azide Agar ISO	30 Water Plates
4704	Cetrimide Agar EP/USP/ISO	30 Water Plates
4702	Chapman TTC Agar (Tergitol 7 Agar)	30 Water Plates
4721	Chromogenic Coliforms Agar (CCA) ISO	30 Water Plates
4729	E. coli-Coliforms Chromogenic Agar Base (BOE)	30 Water Plates
4713	Sabouraud Dextrose Agar with Chloramphenicol EP/USP/ISO	30 Water Plates
4714	Sabouraud Dextrose Agar EP/USP/ISO	30 Water Plates
4720	Endo LES Agar	30 Water Plates
4703	Yeast Extract Agar (YEA) ISO	30 Water Plates
4709	Clostridium Perfringens Agar (m-CP)	30 Water Plates
4722	Fecal Coliforms Agar (m-FC)	30 Water Plates
4706	Standard Methods Agar (PCA) ISO/APHA	30 Water Plates
4740	Pseudomonas Agar CN ISO	30 Water Plates
993	R2A Agar EP (Irradiated)	20 Plates
4711	R2A Agar EP/USP	30 Water Plates
4716	Mannitol Salt Agar (MSA) (Chapman Medium) EP/USP/ISO	30 Water Plates
4712	SPS Agar (Sulfite Polymyxin Sulfadiazine)	30 Water Plates
4728	T.S.C. Agar Base (Tryptose Sulfite Cycloserine) ISO	30 Water Plates
4710	Slanetz-Bartley Medium ISO	30 Water Plates
1071	R2A Agar EP/USP	500 grams
4739	Brettanomyces Agar	30 Water Plates



Aseptic Process Simulation.

For end products of bioprocesses that require **sterility assurance**, the Eur. Ph. recommends following the Media Fill Test (MFT) or Aseptic Process Simulation (APS). This test is used to analyze aseptic filling systems, thus validating that the implemented procedures are adequate to **prevent contamination** of the sterile product.

The culture medium used must be highly nutritious and enable the growth of a wide range of microorganisms, even at low contamination levels.

Condalab evaluates each of our batches with high quality standards to ensure **sterility, performance and batch-to-batch consistency**.

Culture Media

CAT.	PRODUCT	PACK SIZE
1508	Thioglycollate Fluid Medium	500 g and 5 kg
1224	Trypticasein Soy Broth (TSB)	500 g and 5 kg
1380	Vegetable Peptone Broth (TSB Vegetable)	500 g and 5 kg

ANNEX:
Comparative table of Condalab Peptones



CAT.	DESCRIPTION	ESPECIFICATION %					pH (2% solution)	AMINOACIDS %																	MICROBIOLOGICAL ANALYSIS (UFC/G)									
		Amino nitrogen [AN]	Total nitrogen [TN]	AN/TN ratio	Loss on drying	Ash		Calcium	Magnesium	Potassium	Sodium	Alanine	Arginine	Aspartic Acid	Cysteine	Glutamic acid	Glycine	Histidine	Isoleucine	Leucine	Lysine	Methionine	Phenylalanine	Proline	Serine	Treonine	Tryptophan	Tyrosine	Valine	Standard plate count	Yeast and moulds	Coliforms	Salmonella	DIGESTION
1710	Bacteriological Ox Bile				<6%	7,2-9,5																							<5.000	<100	Negative	Negative	Purification	
1700	Beef Extract		>10%		<6%	<15%	6,5-7,5	0,011	0,019	2,6	1,6	3,28	3,22	6,6		15,86	2,29	2,08	3,91	6,5	5,98	1,63	3,58	6,91	4,37	3,56	0,97	1,68	4,85	<5.000	<100	Negative	Negative	Extraction
1702	Beef Extract	>4,5%	>10%			<16%	6,8-7,2																					<5.000	<5	<50	<50	Autolysis		
1721	Yeast Extract Bioprocess Grade	>5%	>10%			<15%	6,8-7,2																					<5.000	Negative	<0,3 MPN/g	Negative	Extraction		
1708	Malt Extract				<6%	4,5-5,5					0,4	0,5	0,9	0	0,16	0,4	0,6	0,5	0,6	0,6	0,2	0,7	0,6	0,4	0,4	0	0,3	0,6	<5.000	<100	<10	Negative	Extraction	
1704	Bacteriological Gelatin					<1%																						<1.000	Negative	Negative	Negative			
1626	Lactalbumin Hydrolysate	>4,8%	>10%		<6%	<15%	6,8	0,078	0,027	0,83	2,1	3,2	1,36	7,59	0,76	17,12	1,83	2,02	4,3	6,52	6,08	1,6	3,08	7,37	4,72	4,58	1,17	0,97	5,07	<5.000	<100	Negative	Negative	Enzymatic
1712	Pork Brain Heart Infusion		>10%	42,7	<6%	<15%	7,25	0,02	0,012	2,11	4,09	3,47	3,31	8,78	0,5	15,04	3,45	1,72	3,35	5,8	5,4	1,65	3,15	6,25	3,8	6,27	0,87	1,49	4,21	<5.000	<100	Negative	Negative	Extraction
1714	Bovine Heart Infusion		>10%		<6%	<15%	7	0,009	0,02	1,4	3,6	3,2	3,55	6,05	0,31	15,97	2,5	2,13	3,91	6,68	6,01	1,75	3,66	7,04	4,54	3,12	0,87	1,31	4,73	<5.000	<100	Negative	Negative	Extraction
1716	Pork Heart Infusion		>10%		<6%	<15%	7,1	0,018	0,012	2,36	3,96	3,32	3,08	8,77	0,54	14,77	2,55	0,05	3,39	5,83	5,43	1,65	3,15	5,84	3,81	3,33	0,91	0	4,24	<5.000	<100	Negative	Negative	Extraction
1628	Peptonized Milk	>1,9%	>6%		<6%	<15%	6,7				1,56	1,71	3,86	0,28	10,01	1,07	1,29	2,43	4,25	3,35	1,02	2,18	4,81	2,73	2,18	0,52	1,2	2,98	<5.000	<100	Negative	Negative	Enzymatic	
1616	Bacteriological Peptone	>2,7%	>10%	32,4	<6%	<15%	6,9	0,018	0,01	1,1	0,97	7,89	7,16	6,34	0,13	9,58	20,6	0,89	2,63	2,84	3,61	0,85	1,88	11,46	3,45	1,87	0,06	0,71	2,31	<5.000	<100	Negative	Negative	Enzymatic
1600	Meat Peptone	>3,4%	>10%	22,6	<6%	<15%	6,9	0,072	0,029	2,7	2,5	5,62	4,08	5,61	0,37	11,62	8,37	1,31	2,63	4,6	4,3	0,85	2,61	6,29	2,95	2,46	0,59	1,11	3,5	<5.000	<100	Negative	Negative	Enzymatic
1624	Pork Meat Peptone	>3,4%	>10%	30	<6%	<15%	7,25	0,02	0,012	2,11	4,09	3,47	3,31	8,78	0,5	15,04	3,45	1,72	3,35	5,8	5,4	1,65	3,15	6,25	3,8	6,27	0,87	1,49	4,21	<5.000	<100	Negative	Negative	Enzymatic
1602	Casein Peptone	>3,9%	>10%		<6%	<15%	6,8	0,019	0,0079	1,3	2,1	2,91	3,3	6,99	0,44	18,74	1,86	2,38	4,45	7,62	6,6	2,32	4,11	8,65	5,08	3,91	0,95	1,86	5,51	<5.000	<100	Negative	Negative	Enzymatic
1604	Acid Casein Peptone (H)	>4%	>7,5%	32	<6%	<45%	7																										Acid hydrolysis	
1603	Casein CC Peptone	>3,9%	>10%	62,26	<6%	<15%	6,8	0,02	0,0069	1,8	2,2	2,94	3,36	6,28	0,41	17,9	1,88	2,39	4,44	7,6	6,63	2,31	4,13	8,62	5,02	3,96	0,92	1,85	5,5	<5.000	<100	Negative	Negative	Enzymatic
1606	Gelatin Peptone	>2,7%	>10%	31,67	<6%	<15%	6	0,018	0,01	0,97	1,1	7,89	7,16	6,34	0,13	9,58	20,6	0,89	2,63	2,84	3,61	0,85	1,88	11,46	3,41	1,87	0,06	0,71	2,31	<5.000	<100	Negative	Negative	Enzymatic
1703	Liver Peptone	4-6%	10-12%	22,6	<6%		5,5-6,5				4,6	1,3	6,6	0	9	5,3	5,7	3,5	5,7	4,8	1,7	3,8	3,4	3	3,3	0	1,1	5,6	<5.000	Negative	Negative	Negative	Enzymatic	
1615	Soy Peptone GMO-Free and Animal-Free	2-3%	9-11%		<5%	≤ 15%	6,5-7,5				2,66	4,08	6,96		13,12	2,59	3,22	2,98	5,1	4,19	0,61	3,04	3,83	2,88	2,28	-	2,04	3,18				Enzymatic		
1610	Polipeptone	>3,7%	>10%		<6%	<15%	6,8	0,03	0,014	1,6	2,12	4,05	3,76	8,83	0,43	15,9	5,7	1,81	3,44	5,99	5,5	1,31	3,34	8,21	4,33	3,31	0,8	1,42	4,31	<5.000	<100	Negative	Negative	Enzymatic
1609	Proteose Peptone	>3,4%	>10%	31,3	<6%	<10%	6,7	0,024	0,023	1,4	2,7	3,49	3,54	6,5	0,38	15,51	3,41	1,98	3,66	6,68	5,81	1,61	3,53	7,11	3,53	3,46	0,8	1,59	4,82				Enzymatic	
1607	Proteose Peptone N°3	>3,4%	>10%	34,2	<6%	<10%	6,7				3,48	3,29	6,69	0,47	16,14	2,9	1,99	3,83	6,5	5,95	1,77	3,56	6,95	4,3	3,57	0,95	1,58	4,89	<5.000	<100	Negative	Negative	Purification	
1706	Bile Salts N° 3			35,02	<5%		5,5-6,5				4,6	1,3	6,6	0	9	5,3	5,7	3,5	5,7	4,8	1,7	3,8	3,4	3	3,3	0	1,1	5,6	<5.000				Enzymatic	
1612	Triptone	>3,9%	>10%		<6%	<15%	6,8	0,019	0,0065	0,95	2,1	2,87	3,31	6,52	0,4	18,7	1,79	2,29	4,48	7,63	6,51	2,35	4,09	8,65	5,08	3,91	1,05	1,86	5,51	<5.000	<100	Negative	Negative	Enzymatic
1614	Triptose	>2,9%	>10%	32	<6%	<15%	7,4	0,001	0,022	0,679	3,41	4,45	4,65	6,34	0,44	13,92	2,84	0,01	0,34	3,67	4,64	1,92	7,52	6,33	4,09	3,55	0,62	2,21	1,93	<5.000	<100	Negative	Negative	Enzymatic
1637	CondaLow® Meat Peptone	≥3,4%	≥10%	32,5	<6%	≤ 15%	6,9	0,072	0,029	2,7	2,5	5,62	4,08	5,61	0,37	11,62	8,37	1,31	2,63	4,5	4,3	0,85	2,61	6,29	2,95	2,46	0,59	1,11	3,5	<5.000	<100	Negative	Negative	Enzymatic
1636	CondaLow® Casein Peptone	≥3,9%	≥10%	30	≤ 6%	≤ 15%	6,8	0,019	0,0079	1,3	2,1	2,91	3,3	6,99	0,44	18,74	1,86	2,38	4,45	7,62	6,6	2,32	4,11	8,65	5,08	3,91	0,95	1,86	5,51	<5.000	<100	Negative	Negative	Enzymatic
1618	CondaLow® Soy Peptone	≥2,2%	≥7%	32	≤ 6%	≤ 15%	7,3	0,039	0,099	4,5	3,16	3,18	3,05	9	0,79	11,83	2,47	1,23	2,55	3,9	3,85	0,86	2,4	2,54	2,69	2,61	0,68	1,38	2,94	<5.000	<100	Negative	Negative	Enzymatic
1626	Lactalbumin Hydrolysate	>4,8%	>10%	34,84	<6%	<15%	6,8	0,078	0,027	0,83	2,1	3,2	1,36	7,59	0,76	17,12	1,83	2,02	4,3	6,52	6,68	1,6	3,08	7,37	4,72	4,58	1,17	0,97	5,07	<5.000	<100	Negative	Negative	Enzymatic

The amino acid values refer to typical and non-specific values of each lot. However, these typical data are the result of frequent revisions.



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