FORMEDIUM™

CREATING THE CULTURE FOR DISCOVERY

CULTURING YEAST

PRODUCT CATALOGUE 2025/26

SACCHAROMYCES CEREVISIAE MEDIA

Saccharomyces Cerevisiae media offered by Formedium™ can be divided into six groups

Complex Media: YPD, YEP, YPAD, YPL, GAL, MAL and Sporulation Media.

Yeast Nitrogen Base (YNB) media in many different formulations.

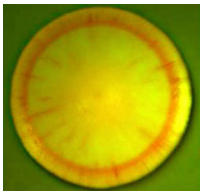
Synthetic Defined (SD) media based upon YNB and with several carbon sources like glucose, galactose and raffinose.

Synthetic Complete (SC) media based upon YNB and with several carbon sources like glucose, galactose and raffinose and supplemented by a complete mixture of amino acids.

Amino Acid "Drop Out" supplements based upon five different formulations.

Yeast Media Components

All media are formulated as described in the Cold Spring Harbor Lab Manual for Yeast Genetics, Kaiser, C., et al., Methods in Yeast Genetics, (Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 1994) and the Difco Manual 11th ed.



Altruism in a single celled organism
Dr. Campbell Gourlay
(Kent Fungal Group)

CONTENTS

28 YEAST NITROGEN BASE W/O AMINO ACIDS & W/O AMMONIUM SULPHATE

41 SYNTHETIC DEFINED MEDIA

COMPLEX MEDIA

Saccharomyces Cerevisiae Complex Media

Complex yeast media containing a homogeneous blend of Peptone, Yeast Extract and Glucose in optimal concentration for growing most Saccharomyces Cerivisiae strains and other yeasts.

GAL INDICATOR MEDIUM

SKU	Size
CCM0702	250g
CCM0705	500g
CCM0710	1000g

GAL Indicator Medium is used for testing the ability to ferment galactose as a carbon source

A Bromthymol blue solution (0.4% stock solution in water) of 20 ml per litre medium has to be added prior to autoclavation.

Formula	g/l
Yeast extract	10
Peptone	20
Galactose	20
Agar	20

Suspend 70 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

MAL INDICATOR MEDIUM

SKU	Size
CCM0602	250g
CCM0603	500g
CCM0610	1000g

MAL Indicator Medium is a fermentation-indicator medium used to distinguish strains that ferment maltose or not. Due to the pH change, the maltose-fermenting strains will change the Bromcresol purple indicator into yellow.

A Bromcresol purple solution (0.4% stock solution in ethanol) of 9 ml per litre medium has to be added prior to autoclavation.

Formula	g/l
Yeast extract	10
Peptone	20
Maltose	20
Agar	20

Suspend 70 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

PRE-SPORULATION MEDIUM

SKU	Size
CCM0902	250g
CCM0905	500g
CCM0910	1000g

Pre-Sporulation Medium is used for strains that do not sporulate well when grown on sporulation medium directly. Cells are grown 1-2 days on pre-sporalation medium before transferring them to sporulation medium.

Formula	g/l
Yeast extract	10
Glucose	100
Potassium Acetate	20
Agar	2

Suspend 150 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SPORULATION MEDIUM

SKU	Size
CCM0802	250g
CCM0805	500g
CCM0810	1000g

GAL Indicator Medium is used for testing the ability to ferment galactose as a carbon source

A Bromthymol blue solution (0.4% stock solution in water) of 20 ml per litre medium has to be added prior to autoclavation.

Formula	g/l
Yeast extract	10
Glucose	0.2
Potassium Acetate	10
Agar	20

Suspend 40.2 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEP AGAR

SKU	Size
CCM0302	250g
CCM0305	500g
CCM0310	1000g

YEP Medium is based upon YPD but is without dextrose and can be used as a base for making YPD media with an alternate carbon source.

To make YEPG-Medium add 38 ml glycerol per litre YEP medium. Glycerol is a non-fermentable carbon source. Respiratory deficient and pet mutants will not grow on YPEG.

Formula	g/l
Yeast extract	10
Peptone	20
Agar	20

Suspend 50 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEP BROTH

SKU	Size
CCM0402	250g
CCM0405	500g
CCM0410	1000g

YEP Medium is based upon YPD but is without dextrose and can be used as a base for making YPD media with an alternate carbon source.

To make YEPG-Medium add 38 ml glycerol per litre YEP medium. Glycerol is a non-fermentable carbon source. Respiratory deficient and pet mutants will not grow on YPEG.

Formula	g/l
Yeast extract	10
Peptone	20

Suspend 30 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YPAD AGAR

SKU	Size
CCM0502	250g
CCM0505	500g
CCM0510	1000g

YPAD Medium (SLANT Medium) is a complex medium used for the production of slants. The adenine is added to inhibit the reversion of ade1 and ade2 mutants.

Formula	g/l
Yeast extract	10
Peptone	20
Glucose	20
Adenine Sulfate	0.04
Agar	20

Suspend 70 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YPAD BROTH

SKU	Size
CCM1002	250g
CCM1005	500g
CCM1010	1000g

YPAD Medium (SLANT Medium) is a complex medium used for the production of slants. The adenine is added to inhibit the reversion of ade1 and ade2 mutants.

Formula	g/l
Yeast extract	10
Peptone	20
Glucose	20
Adenine Sulfate	0.04

Suspend 50 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YPD AGAR

SKU	Size
CCM0102	250g
CCM0105	500g
CCM0110	1000g

YPD medium (YEPD) is a complex medium for routine growth.

Formula	g/l
Yeast extract	10
Peptone	20
Glucose	20
Agar	20

Suspend 70 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YPD BROTH

SKU	Size
CCM0202	250g
CCM0205	500g
CCM0210	1000g
CCM0260	6 x 1kg

YPD medium (YEPD) is a complex medium for routine growth.

Formula	g/l
Yeast extract	10
Peptone	20
Glucose	20

Suspend 50 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YPL AGAR WITH LACTOSE

SKU	Size
YPLA01	250g
YPLA02	500g
YPLA03	1000g

Formula	g/l
Yeast extract	10
Peptone	20
Lactose	20
Adenine Sulfate	0.04
Agar	20

Suspend 70 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YPL BROTH WITH LACTOSE

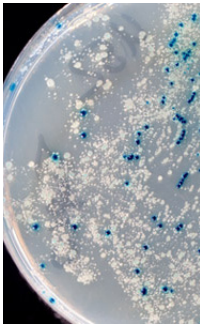
SKU	Size
YPLB01	250g
YPLB02	500g
YPLB03	1000g

Formula	g/l
Yeast extract	10
Peptone	20
Lactose	20
Adenine Sulfate	0.04

Suspend 50 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE MEDIA

Saccharomyces Cerevisiae Yeast Nitrogen Base



Yeast Nitrogen Base media have been prepared according to the formulae of Wickerham (1943-51) and Burkholder (1943). Their research on the nutritional requirements of yeast strains resulted in the formulation of Yeast Nitrogen Base (YNB). YNB is a well defined composition of salts, vitamins, amino acids and a nitrogen source for a vigorous growth of Sacharomyces Cerevisiae.

Besides the original formulation of YNB, Formedium™ produces many variations of this medium without one or more components. These YNB without 'X' media provide the researcher the possibility to grow yeast cells in the absence of a certain component or to replace a particular component.

YEAST CARBON BASE

SKU	Size
CYN0601	100g
CYN0602	250g
CYN0605	500g
CYN0610	1000g

Yeast Carbon Base without Nitrogen source is used to test the ability of yeasts to assimilate nitrogen by the addition of various nitrogen sources. Histidine, Methionine and Tryptophan concentrations has been reduced to 10% of their original concentration as present in Yeast Nitrogen Base.

For technical data please see pages 112 - 113.

Suspend 11.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST MORPHOLOGY AGAR

SKU	Size
CYN0101	100g
CYN0102	250g
CYN0105	500g
CYN0110	1000g

Yeast Agar is a rich well defined medium including Ammonium Sulfate and Asparagine as a nitrogen source and is used for typical colonial morphology. The medium provides a carbon- and nitrogen source in sufficient concentrations including amino acids, vitamins, trace elements and salts resulting in a good development of yeast colonies.

For technical data please see pages 112 - 113.

Suspend 35.0 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE

SKU	Size
CYN0201	100g
CYN0202	250g
CYN0205	500g
CYN0210	1000g

Yeast Nitrogen Base is based upon the formulation of Yeast Agar except that Ammonium Sulfate is the sole nitrogen source and that addition of carbon source is required. The medium may be used to test carbon assimilation in the presence of a carbon source like glucose, galactose or raffinose.

For technical data please see pages 112 - 113.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST VITAMIN FREE BASE

SKU	Size
CYN0701	100g
CYN0702	250g
CYN0705	500g
CYN0710	1000g

Yeast Nitrogen Base Vitamin Free is based upon the formulation of Yeast Nitrogen base except that all vitamins are omitted. The medium is used to test the requirement of essential vitamins.

For technical data please see pages 112 - 113.

Suspend 17.0 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST POTASSIUM NITRATE NITROGEN BASE

SKU	Size
CYN0301	100g
CYN0302	250g
CYN0305	500g
CYN0310	1000g

Yeast Potassium Nitrate Nitrogen Base contains Potassium Nitrate as a sole nitrogen source to test nitrogen assimilation. The addition of a carbon source is required. Histidine, Methionine and Tryptophan concentrations has been reduced to 10% of their original concentration as present in Yeast Nitrogen Base.

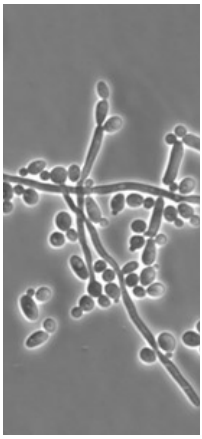
Yeasts which have grown on a rich medium like Yeast Agar may carry a reserve of nitrogen in the form of protein. To avoid errors due to this reserve of nitrogen it is advised to make two serial transfers in the medium. Seven days after the first inoculation the second inoculation is made in the same medium. If a positive result is obtained after seven days, the yeast cells assimilates nitrate as sole nitrogen source.

For technical data please see pages 112 - 113.

Suspend 2.7 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS

Saccharomyces Cerevisiae Yeast Nitrogen Base without Amino Acids



Yeast Nitrogen Base media have been prepared according the to formulae of Wickerham (1943-51) and Burkholder (1943). Their research on the nutritional requirements of yeast strains resulted in the formulation of Yeast Nitrogen Base (YNB). YNB is a well defined composition of salts, vitamins, amino acids and a nitrogen source for a vigorous growth of Sacharomyces Cerevisiae.

Besides the original formulation of YNB, Formedium™ produces many variations of this medium without one or more components. These YNB without 'X' media provide the researcher the possibility to grow yeast cells in the absence of a certain component or to replace a particular component.

* Please note all formulations within this product range are based upon Yeast Nitrogen Base without Amino Acids and without the Component/ Components selected.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS

SKU	Size
CYN0401	100g
CYN0402	250g
CYN0405	500g
CYN0410	1000g

Yeast Nitrogen Base without amino acids (YNB w/o AA) is used for selecting yeasts based on amino acid and carbohydrate requirements. In Yeast Nitrogen Base with out amino acids Ammonium sulphate is included as a readily available nitrogen source for nitrogen assimilation. The medium includes all other vitamins, mineral salts and trace elements required for a vigorous growth of yeast cells.

Compared to full Yeast Nitrogen Base medium, Yeast Nitrogen Base without amino acids lacks Histidine, Methionine and Trypthophan. In combination with Drop Out medium supplement mixtures Yeast Nitrogen Base without Amino acids provides an excellent medium to cultivate and to select auxothophic strains of yeast that requires the addition of essential nutrients like amino acids and/or vitamins.

The addition of a carbon source like glucose, galactose or raffinose is required. Synthetic Dextrose Minimal medium (SD medium) and Synthetic Complete medium (SC medium) are based upon Yeast Nitrogen Base w/o amino acids and are complemented with glucose, galactose and raffinose as carbon sources.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT BIOTIN

SKU	Size
CYN4101	100g
CYN4102	500g
CYN4110	1000g

Biotin is omitted from this formulation of Yeast Nitrogen base w/o Amino acids to provide the researcher the possibility to grow yeast cells in the absence of biotin or to replace this vitamin.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT BORON

SKU	Size
CYN1501	100g
CYN1502	500g
CYN1510	1000g

Boric acid, HBO3, is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Boron or to replace this element.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT CALCIUM

SKU	Size
CYN2501	100g
CYN2502	500g
CYN2510	1000g

Calcium chloride, CaCl2 is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of calcium or to replace this element.

For technical data please see pages 118 - 119.

Suspend 6.8 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT CALCIUM PANTOTHENATE

SKU	Size
CYN3301	100g
CYN3302	500g
CYN3310	1000g

Calcium-pantothenate is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of calcium-pantothenate or to replace this vitamin.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT COPPER

SKU	Size
CYN0901	100g
CYN0902	250g
CYN0905	500g
CYN0910	1000g

Cupric sulphate, CuSO4.5H2O, is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of copper or to replace this element.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT FOLIC ACID

SKU	Size
CYN3501	100g
CYN3502	500g
CYN3510	1000g

Folic acid is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Folic acid or to replace this vitamin.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT FOLIC ACID AND RIBOFLAVIN. LOFLO

SKU	Size
CYN6501	100g
CYN6502	250g
CYN6505	500g
CYN6510	1000g

Yeast Nitrogen Base w/o Amino acids LoFlo is a low fluorescence YNB type medium.

By omitting Folic acid and Riboflavin from the original YNB w/o Amino acids formulation the result is a very low fluorescence back ground medium.

Yeast Nitrogen Base w/o Amino acids LoFlo is excellent for whole-cell fluorescence experiments and because of its low fluorescence background the fluorescence of cells can be measured directly in the medium.

Yeast Nitrogen Base w/o Amino acids LoFlo is well suited for intracellular pH measurements in cells expressing pHluorin in combination with Raman spectroscopy..

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT INOSITOL

SKU	Size
CYN3701	100g
CYN3702	500g
CYN3710	1000g

Inositol is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of inositol or to replace this vitamin.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT IODINE

SKU	Size
CYN4901	100g
CYN4902	500g
CYN4910	1000g

Potassium Iodide, KI, is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Iodine or to replace this element.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT IRON

SKU	Size
CYN1101	100g
CYN1102	500g
CYN1110	1000g

Ferric chloride, FeCl3, is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Iron or to replace this element.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT MAGNESIUM

SKU	Size
CYN0901	100g
CYN0902	250g
CYN0905	500g

Magnesium sulphate, MgSO4.7H2O is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of magnesium or to replace this element.

For technical data please see pages 118 - 119.

Suspend 6.2 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT MANGANESE

SKU	Size
CYN1901	100g
CYN1902	500g
CYN1910	1000g

Manganese sulphate, MnSO4.H20 is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Manganese or to replace this element.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT MOLYBDENE

SKU	Size
CYN2101	100g
CYN2102	500g
CYN2110	1000g

Molybdic acid Sodium salt, MoNa2O5.2H2O is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Molybdene or to replace this element.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT NICOTINIC ACID

SKU	Size
CYN3901	100g
CYN3902	500g
CYN3910	1000g

Nicotinic acid is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of nicotinic acid or to replace this vitamin.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT PARA-AMINO BENZOIC ACID

SKU	Size
CYN4101	100g
CYN4102	500g
CYN4110	1000g

Para-Amino benzoic acid is omitted from this formulation of Yeast Nitrogen base w/o Amino acids to provide the researcher the possibility to grow yeast cells in the absence of para-Amino Benzoic acid or to replace this vitamin.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT PHOSPHATE

SKU	Size
CYN0801	100g
CYN0802	250g
CYN0803	500g
CYN0804	1000g

The absence of phosphate (KH2PO4) provides the possibility to include alternative sources of phosphate, like P32 labeled components, or to select an optimal concentration of phosphate for certain yeast cell lines.

For technical data please see pages 118 - 119.

Suspend 5.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT PHOSPHATE, SUPPLEMENTED WITH KCL

SKU	Size
CYN6701	100g
CYN6702	250g
CYN6703	500g
CYN6704	1kg

The absence of phosphate (KH2PO4) provides the possibility to include alternative sources of phosphate, like P32 labeled components, or to select an optimal concentration of phosphate for certain yeast cell lines.

By omitting Potassium DiHydrogen Phosphate (KH2PO4), not only Phosphate (PO4-3) but also Potassium (K+) is omitted.

As a result yeasts are not only limited in Phosphate, but also in Potassium. This might cause problems in osmo-molarity and intercellular Potassium ion concentrations finally resulting in poor cell growth and low yields.

To avoid this problem an extra 550 mg/l (7.35 mM) of KCl is added. By adding this concentration of KCl the original concentration of K+ as present in YNB is restored. The extra addition of Chlorine is in almost all cases no problems to your cells.

Suspend 6.5 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT PYRIDOXINE

SKU	Size
CYN4301	100g
CYN4302	500g
CYN4310	1000g

Pyridoxine HCl is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of pyridoxine or to replace this vitamin.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT RIBOFLAVIN

SKU	Size
CYN4501	100g
CYN4502	250g
CYN4505	500g

Riboflavin is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of nicotinic acid or to replace this vitamin.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, WITHOUT SODIUM

SKU	Size
CYN2901	100g
CYN2902	500g
CYN2910	1000g

Sodium chloride, NaCl is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Sodium or to replace this element.

For technical data please see pages 118 - 119.

Suspend 6.8 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT THIAMINE

SKU	Size
CYN4701	100g
CYN4702	500g
CYN4710	1000g

Thiamine HCl is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of thiamine or to replace this vitamin.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT ZINC

SKU	Size
CYN2301	100g
CYN2302	500g
CYN2310	1000g

Zinc sulphate, ZnSO4.7H20 is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Zinc or to replace this element.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, WITHOUT COPPER AND WITHOUT IRON

SKU	Size
CYN1301	100g
CYN1302	500g
CYN1310	1000g

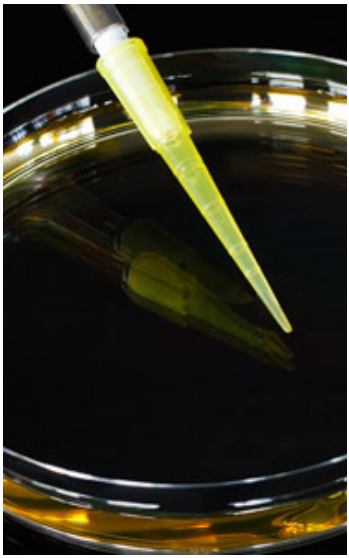
Cupric sulphate, CuSO4.5H2O, and Ferric chloride, FeCl3 are omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of copper and iron or to replace these elements.

For technical data please see pages 118 - 119.

Suspend 6.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS & WITHOUT AMMONIUM SULPHATE

Saccharomyces Cerevisiae Yeast Nitrogen Base without Amino Acids and without Ammonium Sulphate



Yeast Nitrogen Base media have been prepared according to the formulae of Wickerham (1943-51) and Burkholder (1943). Their research on the nutritional requirements of yeast strains resulted in the formulation of Yeast Nitrogen Base (YNB). YNB is a well defined composition of salts, vitamins, amino acids and a nitrogen source for a vigorous growth of Sacharomyces Cerevisiae.

Besides the original formulation of YNB, Formedium™ produces many variations of this medium without one or more components. These YNB without 'X' media provide the researcher the possibility to grow yeast cells in the absence of a certain component or to replace a particular component.

* Please note all formulations within this product range are based upon Yeast Nitrogen Base without Amino Acids, without Ammonium Sulphate and without the Component/ Components selected.

TRANSLUCENT K+ FREE MEDIUM, YNB W/O AMINO ACIDS AND WITHOUT AMMONIUM SULPHATE AND W/O POTASSIUM

SKU	Size
CYN7501	100g
CYN7505	500g
CYN7510	1000g

In Translucent K+ free medium ammonium phosphate (0.92 g/l) substitutes for potassium phosphate to reduce the amount of potassium to a minimum.

For technical data please see pages 120 - 121.

Suspend 1.6 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

TRANSLUCENT K+ FREE MEDIUM, YNB W/O AMINO ACIDS AND WITHOUT AMMONIUM SULPHATE AND W/O POTASSIUM AND W/O FOLIC ACID AND W/O RIBOFLAVIN

SKU	Size
CYN10001	100g
CYN10005	500g
CYN10010	1000g

In Translucent K+ free medium ammonium phosphate (0.92 g/l) substitutes for potassium phosphate to reduce the amount of potassium to a minimum. Both Folic acid and Riboflavin are omitted from the medium to make it suitable for fluorescence measurements with yeast cultures.

For technical data please see pages 120 - 121.

Suspend 1.6 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, AND WITHOUT AMMONIUM SULPHATE

SKU	Size
CYN0501	100g
CYN0502	250g
CYN0505	500g
CYN0510	1000g

east Nitrogen Base without Amino Acids and without Ammonium Sulfate has the same formulation as Yeast Nitrogen Base without Amino Acids except that Ammonium Sulfate as a source of Nitrogen has been omitted to test the ability of yeast cells to assimilate different nitrogen sources for example Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, WITHOUT AMMONIUM SULPHATE AND WITHOUT BIOTIN

SKU	Size
CYN3201	100g
CYN3202	500g
CYN3210	1000g

Biotin is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of biotin or to replace this vitamin.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, WITHOUT AMMONIUM SULPHATE AND WITHOUT BORON

SKU	Size
CYN1601	100g
CYN1602	500g
CYN1610	1000g

Boric acid, HBO3, is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Boron or to replace this element.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, W/O AMMONIUM SULPHATE AND WITHOUT CALCIUM

SKU	Size
CYN2601	100g
CYN2602	500g
CYN2610	1000g

Calcium chloride, CaCl2 is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of calcium or to replace this element.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.8 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, WITHOUT AMMONIUM SULPHATE AND WITHOUT CALCIUM PANTOTHENATE

SKU	Size
CYN3401	100g
CYN3402	500g
CYN3410	1000g

Calcium-pantothenate is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of calcium-pantothenate or to replace this vitamin.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, WITHOUT AMMONIUM SULPHATE AND WITHOUT COPPER

SKU	Size
CYN1001	100g
CYN1002	500g
CYN1010	1000g

Cupric sulphate, $CuSO_4.5H_2O$, is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of copper or to replace this element.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, W/O AMMONIUM SULPHATE AND WITHOUT FOLIC ACID

SKU	Size
CYN3601	100g
CYN3602	500g
CYN3610	1000g

Folic acid is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Folic acid or to replace this vitamin.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, W/O AMMONIUM SULPHATE & W/O FOLIC ACID & RIBOFLAVIN

SKU	Size
CYN6201	100g
CYN6202	250g
CYN6205	500g
CYN6210	1000g

Yeast Nitrogen Base w/o Amino acids w/o Ammonium sulphate LoFlo is a low fluorescence YNB type medium.

By omitting Folic acid and Riboflavine from the original YNB w/o Amino acids formulation the result is a very low fluorescence back ground medium.

Yeast Nitrogen Base w/o Amino acids w/o Ammonium sulphate LoFlo is excellent for whole-cell fluorescence experiments and because of its low fluorescence background the fluorescence of cells can be measured directly in the medium.

Yeast Nitrogen Base w/o Amino acids w/o Ammonium sulphate LoFlo is well suited for intracellular pH measurements in cells expressing pHluorin in combination with Raman spectroscopy.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, W/O AMMONIUM SULPHATE AND W/O INOSITOL

SKU	Size
CYN3801	100g
CYN3802	500g
CYN3810	1000g

Inositol is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of inositol or to replace this vitamin.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, W/O AMMONIUM SULPHATE AND W/O IODINE

SKU	Size
CYN1801	100g
CYN1802	500g
CYN1810	1000g

Potassium Iodide, KI, is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Iodine or to replace this element.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, WITHOUT AMMONIUM SULPHATE AND W/O IRON

SKU	Size
CYN1201	100g
CYN1202	500g
CYN1210	1000g

Ferric chloride, FeCl3, is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Iron or to replace this element.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, W/O AMMONIUM SULPHATE AND W/O MAGNESIUM

SKU	Size
CYN2801	100g
CYN2802	500g
CYN2810	1000g

Magnesium sulphate, MgSO4.7H2O is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of magnesium or to replace this element.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.2 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE WITHOUT AMINO ACIDS, W/O AMMONIUM SULPHATE AND W/O MANGANESE

SKU	Size
CYN2001	100g
CYN2002	500g
CYN2010	1000g

Manganese sulphate, MnSO4.H20 is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Manganese or to replace this element.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, WITHOUT AMMONIUM SULPHATE AND W/O MOLYBDENE

SKU	Size
CYN2201	100g
CYN2202	500g
CYN2210	1000g

Molybdic acid Sodium salt, MoNa2O5.2H2O is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Molybdene or to replace this element.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, WITHOUT AMMONIUM SULPHATE AND W/O NICOTINIC ACID

SKU	Size
CYN4001	100g
CYN4002	500g
CYN4010	1000g

Nicotinic acid is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of nicotinic acid or to replace this vitamin.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, W/O AMMONIUM SULPHATE & W/O PARA-AMINO BENZOIC ACID

SKU	Size
CYN4201	100g
CYN4202	500g
CYN4210	1000g

Para-Amino benzoic acid is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of para-Amino Benzoic acid or to replace this vitamin.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, W/O AMMONIUM SULPHATE AND W/O PHOSPHATE, SUPPLEMENTED WITH KCL

SKU	Size
CYN6801	100g
CYN6802	250g
CYN6803	500g
CYN6804	1kg

The absence of phosphate (KH2PO4) provides the possibility to include alternative sources of phosphate, like P32 labeled components, or to select an optimal concentration of phosphate for certain yeast cell lines.

By omitting Potassium DiHydrogen Phosphate (KH2PO4), not only Phosphate (PO4-3) but also Potassium (K+) is omitted.

As a result yeasts are not only limited in Phosphate, but also in Potassium. This might cause problems in osmo-molarity and intercellular Potassium ion concentrations finally resulting in poor cell growth and low yields.

To avoid this problem an extra 550 mg/l (7.35 mM) of KCl is added. By adding this concentration of KCl the original concentration of K+ as present in YNB is restored. The extra addition of Chlorine is in almost all cases no problems to your cells.

Suspend 1.5 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, W/O AMMONIUM SULPHATE AND W/O PYRIDOXINE

SKU	Size
CYN4401	100g
CYN4402	500g
CYN4410	1000g

Pyridoxine HCl is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of pyridoxine or to replace this vitamin.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, W/O AMMONIUM SULPHATE AND W/O RIBOFLAVIN

SKU	Size
CYN4601	100g
CYN4602	500g
CYN4610	1000g

Riboflavin is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of nicotinic acid or to replace this vitamin.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, W/O AMMONIUM SULPHATE AND W/O SODIUM

SKU	Size
CYN3001	100g
CYN3002	500g
CYN3010	1000g

Sodium chloride, NaCl is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Sodium or to replace this element.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.8 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, W/O AMMONIUM SULPHATE AND W/O THIAMINE

SKU	Size
CYN4801	100g
CYN4802	500g
CYN4810	1000g

Thiamine HCl is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of thiamine or to replace this vitamin.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, W/O AMMONIUM SULPHATE AND W/O ZINC

SKU	Size
CYN2401	100g
CYN2402	500g
CYN2410	1000g

Zinc sulphate, ZnSO4.7H20 is omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of Zinc or to replace this element.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

For technical data please see pages 120 - 121.

Suspend 1.8 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YEAST NITROGEN BASE W/O AMINO ACIDS, W/O AMMONIUM SULPHATE, W/O COPPER & W/O IRON

SKU	Size
CYN1701	100g
CYN1702	500g
CYN1710	1000g

Cupric sulphate, CuSO4.5H2O, and Ferric chloride, FeCl3 are omitted from this formulation of Yeast Nitrogen base without Amino acids to provide the researcher the possibility to grow yeast cells in the absence of copper and iron or to replace these elements.

Ammonium sulphate, as a source of Nitrogen, has been omitted to test the ability of yeast cells to assimilate different nitrogen sources like Potassium nitrate.

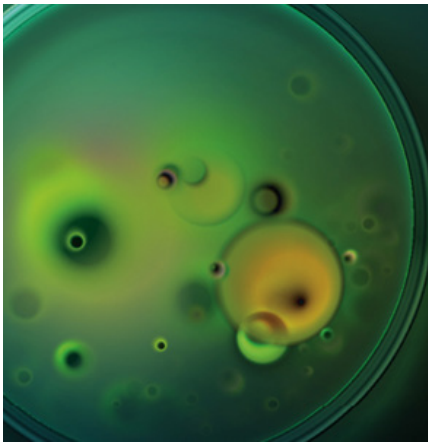
For technical data please see pages 120 - 121.

Suspend 1.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SYNTHETIC DEFINED MEDIA

Saccharomyces Cerevisiae Synthetic Minimal Media (SD Media)

Synthetic Minimal Media (SD media) are based upon Yeast Nitrogen Base without Amino Acids and supplemented with a carbon source like glucose, galactose, raffinose, succinate or a combination of carbon sources. The Synthetic Minimal Media are available with or without Agar premixed.



SD AGAR / 2% GALACTOSE

SKU	Size
CSM0301	100g
CSM0302	250g
CSM0305	500g
CSM0310	1000g

For technical data please see pages 116 - 117.

Suspend 44.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD AGAR / 2% GALACTOSE / 1% RAFFINOSE

SKU	Size
CSM0901	100g
CSM0902	250g
CSM0905	500g
CSM0910	1000g

SD Agar / Galactose and Raffinose containing Yeast Nitrogen base without Amino Acids, galactose, raffinose and agar.

For technical data please see pages 116 - 117.

Suspend 54.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD AGAR / 2% GLUCOSE

SKU	Size
CSM0101	100g
CSM0102	250g
CSM0105	500g
CSM0110	1000g

SD Agar / Glucose containing Yeast Nitrogen base without Amino Acids, glucose and agar.

For technical data please see pages 116 - 117.

Suspend 44.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD AGAR / 2% GLUCOSE W/O PHOSPHATE (KH2PO4)

SKU	Size
CSM1101	100g
CSM1102	250g
CSM1103	500g
CSM1104	1000g

SD Agar / 2% Glucose w/o Phosphate (KH2PO4) is based upon Yeast Nitrogen base without Amino acids including and Glucose plus Agar. The absence of phosphate (KH2PO4) provides the possibility to include alternative sources of phosphate, like P32 labeled components, or to select an optimal concentration of phosphate for certain yeast cell lines.

For technical data please see pages 116 - 117.

Suspend 43.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD AGAR / 2% RAFFINOSE

SKU	Size
CSM0501	100g
CSM0502	250g
CSM0505	500g
CSM0510	1000g

For technical data please see pages 116 - 117.

Suspend 44.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD AGAR / 3.3% SUCCINATE

SKU	Size
CSM0701	100g
CSM0702	250g
CSM0705	500g
CSM0710	1000g

For technical data please see pages 116 - 117.

Suspend 39.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD BROTH / 2% GALACTOSE

SKU	Size
CSM0401	100g
CSM0402	250g
CSM0405	500g
CSM0410	1000g

For technical data please see pages 116 - 117.

Suspend 26.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD BROTH / 2% GALACTOSE / 1% RAFFINOSE

SKU	Size
CSM1001	100g
CSM1002	250g
CSM1005	500g
CSM1010	1000g

SD Broth / Galactose and Raffinose containing Yeast Nitrogen base without Amino Acids, galactose and raffinose. Agar has been omitted from the original formulation.

For technical data please see pages 116 - 117.

Suspend 36.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD BROTH / 2% GLUCOSE

SKU	Size
CSM0101	100g
CSM0102	250g
CSM0105	500g
CSM0110	1000g

SD Broth / Glucose containing Yeast Nitrogen base without Amino Acids and glucose. Agar has been omitted from the original formulation.

For technical data please see pages 116 - 117.

Suspend 26.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD BROTH / 2% GLUCOSE W/O PHOSPHATE (KH2PO4)

SKU	Size
CSM1201	100g
CSM1202	250g
CSM1203	500g
CSM1204	1000g

SD Broth / 2% Glucose w/o Phosphate (KH2PO4) is based upon Yeast Nitrogen base without Amino acids and including glucose. The absence of phosphate (KH2PO4) provides the possibility to include alternative sources of phosphate, like P32 labeled components, or to select an optimal concentration of phosphate for certain yeast cell lines.

For technical data please see pages 116 - 117.

Suspend 25.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD BROTH / 2% RAFFINOSE

SKU	Size
CSM0601	100g
CSM0602	250g
CSM0605	500g
CSM0610	1000g

For technical data please see pages 116 - 117.

Suspend 26.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SD BROTH / 3.3% SUCCINATE

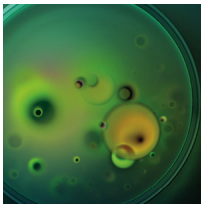
SKU	Size
CSM0801	100g
CSM0802	250g
CSM0805	500g
CSM0810	1000g

For technical data please see pages 116 - 117.

Suspend 57.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SYNTHETIC COMPLETE MEDIA

Saccharomyces Cerevisiae Synthetic Complete Media



Synthetic Complete Medium (SC medium) is based upon Yeast Nitrogen Base supplemented with a carbon source and in which each of the commonly encountered auxothropies is supplemented by a complete mixture of amino acids and vitamins. The amino acid, vitamin mixture contains all possible supplements, i.e. nothing is dropped out in contrast to "Drop Out" mixtures. Cultures on SC Media combined with cultures on Yeast Nitrogen Base without Amino Acids in combination with drop out mixtures can be used to select for auxothrophies as in Yeast Genetics.

Formedium™ provides SC media supplemented with a carbon source like glucose, galactose, raffinose, succinate or a combination of carbon sources. The SC media are available with or without Agar premixed.

SC Media amino acid and vitamin supplement is available as a separate mixture as well for addition to other types of yeast media to supplement auxothrophies.

SC AGAR / 2% GALACTOSE

SKU	Size
CSC0301	100g
CSC0302	250g
CSC0305	500g
CSC0310	1kg

For technical data please see pages 114 - 115.

Suspend 46.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SC AGAR / 2% GALACTOSE / 1% RAFFINOSE

SKU	Size
CSC0901	100g
CSC0902	250g
CSC0905	500g
CSC0910	1kg

For technical data please see pages 114 - 115.

Suspend 56.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SC AGAR / 2% GLUCOSE

SKU	Size
CSC0101	100g
CSC0102	250g
CSC0105	500g
CSC0110	1kg

For technical data please see pages 114 - 115.

Suspend 46.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SC AGAR / 2% RAFFINOSE

SKU	Size
CSC0501	100g
CSC0502	250g
CSC0505	500g
CSC0510	1kg

For technical data please see pages 114 - 115.

Suspend 46.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SC AGAR / 3.3% SUCCINATE

SKU	Size
CSC0701	100g
CSC0702	250g
CSC0705	500g
CSC0710	1kg

For technical data please see pages 114 - 115.

Suspend 41.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SC BROTH / 2% GALACTOSE

SKU	Size
CSC0401	100g
CSC0402	250g
CSC0405	500g
CSC0410	1kg

For technical data please see pages 114 - 115.

Suspend 28.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SC BROTH / 2% GALACTOSE / 1% RAFFINOSE

SKU	Size
CSC1001	100g
CSC1002	250g
CSC1005	500g
CSC1010	1kg

For technical data please see pages 114 - 115.

Suspend 38.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SC BROTH / 2% GLUCOSE

SKU	Size
CSC0201	100g
CSC0202	250g
CSC0205	500g
CSC0210	1kg

For technical data please see pages 114 - 115.

Suspend 28.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SC BROTH / 2% RAFFINOSE

SKU	Size
CSC0601	100g
CSC0602	250g
CSC0605	500g
CSC0610	1kg

For technical data please see pages 114 - 115.

Suspend 28.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SC BROTH / 3.3% SUCCINATE

SKU	Size
CSC0801	100g
CSC0802	250g
CSC0805	500g
CSC0810	1kg

For technical data please see pages 114 - 115.

Suspend 59.9 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

SACCHAROMYCES CEREVISIAE AMINO ACID DROP-OUT SUPPLEMENTS

Drop-Out supplements are based upon a standard mixture of Amino acids, Vitamins and other components used to supplement encountered auxothropies. In each of the Drop-Out mixtures as provided by Formedium™ every component is provided except one or more supplements of interest, i.e. the "dropped out" supplements.

Formedium™ is producing five different groups of Drop-Out supplements based on five basic amino acid mixtures as described by different authors. Each basic mixture supports optimal growth of yeast, but lacks one or more essential nutrients, useful to select for auxotrophic requirements and transformants.

For more detailed information about all different Drop-Out formulations derived from each basic amino acid supplement mixture, please choose from the categories displayed below.

COMPLETE SUPPLEMENT MIXTURE, (CSM)

Saccharomyces Cerevisiae Drop-Out Supplements Complete Supplement Mixture (CSM)

Complete Supplement Mixture (CSM) is a combination of Amino Acids, Vitamins and other essential components to support a vigorous growth of cells in CSM supplemented medium. Yeast Nitrogen Base media without Amino Acids supplemented with CSM have been proven to be an excellent combination for the cultivation of almost all strains of Saccharomyces Cerevisiae and to supplement encountered auxothrophies.

CSM is also a basis for many "Drop-Out" mixtures to select for auxotrophic requirements and transformants. Each CSM Drop-Out mixture contain all components except for one to five essential nutrients, i.e. the "dropped out" supplements. Some CSM Drop-Out mixtures are also available with additions of extra Amino Acids and other components.

Complete Supplement Mixture formulations are available in 10 gram and 100 gram pack sizes. If you would like to order, or get a quote, on a larger pack size, please contact us. Please enquire about custom made formulations.

Formula	mg/l
Adenine	10
L-Arginine	50
L-Aspartic acid	80
L-Histidine HCl	20
L-Isoleucine	50
L-Leucine	100
L-Lysine HCl	50
L-Methionine	20
L-Phenylalanine	50
L-Threonine	100
L-Tryptophan	50
L-Tyrosine	50
Uracil	20
Valine	140
Total	790

COMPLETE CSM MIXTURE

Formulation	mg/l	10g	100g
CSM	790	DCS0011	DCS0019
CSM, + 20 Ade	800	DCS0021	DCS0029
CSM, + 40 Ade	820	DCS0031	DCS0039

CSM SINGLE DROP-OUT

Formulation	mg/l	10g	100g
CSM, -Ade	780	DCS0041	DCS0049
CSM, -Arg	740	DCS0051	DCS0059
CSM, -Asp	710	DCS0061	DCS0069
CSM, -His	770	DCS0071	DCS0079
CSM, -Iso	740	DCS0081	DCS0089
CSM, -Leu	690	DCS0091	DCS0099
CSM, -Lys	740	DCS0101	DCS0109
CSM, -Met	770	DCS0111	DCS0119
CSM, -Phe	740	DCS0121	DCS0129
CSM, -Thr	690	DCS0131	DCS0139
CSM, -Trp	740	DCS0141	DCS0149
CSM, -Tyr	740	DCS0151	DCS0159
CSM, -Ura	770	DCS0161	DCS0169
CSM, -Val	650	DCS0171	DCS0179
CSM, -Arg, + 40 Ade	770	DCS0181	DCS0189
CSM, -His, + 20 Ade	780	DCS0191	DCS0199

Formulation	mg/l	10g	100g
CSM, -His, + 40 Ade	800	DCS0201	DCS0209
CSM, -Leu, + 5 Ade	695	DCS0211	DCS0219
CSM, -Leu, + 20 Ade	700	DCS0221	DCS0229
CSM, -Leu, + 40 Ade	720	DCS0231	DCS0239
CSM, -Lys, + 40 Ade	770	DCS0241	DCS0249
CSM, -Trp, + 5 Ade	735	DCS0251	DCS0259
CSM, -Trp, + 20 Ade	750	DCS0261	DCS0269
CSM, -Ura, + 20 Ade	780	DCS0271	DCS0279
CSM, -Ura, + 40 Ade	800	DCS0281	DCS0289
CSM, -Trp, + 10 Ala	750	DCS0291	DCS0299
CSM, -Trp, + 25 Ala	765	DCS0301	DCS0309
CSM, -Trp, + 50 Ala	790	DCS0311	DCS0319
CSM, -His, + 10 Ala	780	DCS0321	DCS0329
CSM, -His, + 25 Ala	795	DCS0331	DCS0339
CSM, -His, + 50 Ala	820	DCS0341	DCS0349

CSM DOUBLE DROP-OUT

Formulation	mg/l	10g	100g
CSM, -Ade, -Arg	730	DCS0351	DCS0359
CSM, -Ade, -His	760	DCS0361	DCS0369
CSM, -Ade, -Leu	680	DCS0371	DCS0379
CSM, -Ade, -Lys	730	DCS0381	DCS0389
CSM, -Ade, -Met	760	DCS0391	DCS0399
CSM, -Ade, -Trp	730	DCS0401	DCS0409
CSM, -Ade, Ura	760	DCS0411	DCS0419
CSM, -Arg, -His	720	DCS0421	DCS0429
CSM, -Arg, -Leu	640	DCS0431	DCS0439
CSM, -Arg, -Trp	690	DCS0441	DCS0449
CSM, -Arg, -Ura	720	DCS0451	DCS0459
CSM, -His, -Leu	670	DCS0461	DCS0469
CSM, -His, -Lys	720	DCS0471	DCS0479
CSM, -His, -Met	750	DCS0481	DCS0489
CSM, -His, -Thr	670	DCS0491	DCS0499
CSM, -His, -Trp	720	DCS0501	DCS0509
CSM, -His, -Tyr	720	DCS0511	DCS0519
CSM, -His, -Ura	750	DCS0521	DCS0529
CSM, -Leu, -Lys	640	DCS0531	DCS0539
CSM, -Leu, -Met	670	DCS0541	DCS0549
CSM, -Leu, -Thr	590	DCS0551	DCS0559
CSM, -Leu, -Trp	640	DCS0561	DCS0569
CSM, -Leu, -Tyr	640	DCS0571	DCS0579
CSM, -Leu,-Ura	670	DCS0581	DCS0589
CSM, -Lys, -Met	720	DCS0591	DCS0599
CSM, -Lys, -Thr	640	DCS0601	DCS0609
CSM, -Lys, -Trp	690	DCS0611	DCS0619

Formulation	mg/l	10g	100g
CSM, -Lys, -Tyr	690	DCS0621	DCS0629
CSM, -Lys, -Ura	720	DCS0631	DCS0639
CSM, -Met, -Trp	720	DCS0641	DCS0649
CSM, -Met, -Ura	750	DCS0651	DCS0659
CSM, -Thr, Trp	640	DCS0661	DCS0669
CSM, -Thr, -Ura	670	DCS0671	DCS0679
CSM, -Trp, -Tyr	690	DCS0681	DCS0689
CSM, -Trp, -Ura	720	DCS0691	DCS0699
CSM, -Tyr, -Ura	720	DCS0701	DCS0709
CSM, -His, -Leu, + 20 Ade	680	DCS0711	DCS0719
CSM, -His, -Leu, + 40 Ade	700	DCS0721	DCS0729
CSM, -His, -Trp, + 20 Ade	730	DCS0731	DCS0739
CSM, -His, -Trp, + 40 Ade	750	DCS0741	DCS0749
CSM, -His, -Ura, + 40 Ade	780	DCS0751	DCS0759
CSM, -Leu, -Met, + 40 Ade	700	DCS0761	DCS0769
CSM, -Leu, -Trp, + 20 Ade	650	DCS0771	DCS0779
CSM, -Leu, -Trp, + 40 Ade	670	DCS0781	DCS0789
CSM, -Leu, -Ura, + 40 Ade	700	DCS0791	DCS0799
CSM, -Trp, -Ura, + 40 Ade	750	DCS0801	DCS0809
CSM, -Leu, -Ura, + 30 Ser	700	DCS0811	DCS0819

CSM TRIPLE DROP-OUT

Formulation	mg/l	10g	100g
CSM, -Ade, -Arg, -Lys	680	DCS0821	DCS0829
CSM, -Ade, -His, -Leu	660	DCS0831	DCS0839
CSM, -Ade, -His, -Trp	710	DCS0841	DCS0849
CSM, -Ade, -His, -Ura	740	DCS0851	DCS0859
CSM, -Ade, -Leu, -Met	660	DCS0861	DCS0869
CSM, -Ade, -Leu, -Trp	630	DCS0871	DCS0879
CSM, -Ade, -Leu, -Ura	660	DCS0881	DCS0889
CSM, -Ade, -Met, -Trp	710	DCS0891	DCS0899
CSM, -Ade, -Met, -Ura	740	DCS0901	DCS0909
CSM, -Ade, -Trp, -Ura	710	DCS0911	DCS0919
CSM, -Arg, -His, -Lys	670	DCS0921	DCS0929
CSM, -Arg, -His, -Ura	700	DCS0931	DCS0939
CSM, -Arg, -Leu, -Ura	620	DCS0941	DCS0949
CSM, -Arg, -Trp, -Ura	670	DCS0951	DCS0959
CSM, -His, -Leu, -Lys	620	DCS0961	DCS0969
CSM, -His, -Leu, -Trp	620	DCS0971	DCS0979
CSM, -His, -Leu, -Met	650	DCS0981	DCS0989
CSM, -His, -Leu, -Ura	650	DCS0991	DCS0999
CSM, -His, -Lys, -Trp	670	DCS1001	DCS1009

Formulation	mg/l	10g	100g
CSM, -His, -Lys, -Ura	700	DCS1011	DCS1019
CSM, -His, -Met, -Trp	700	DCS1021	DCS1029
CSM, -His, -Met, -Ura	730	DCS1031	DCS1039
CSM, -His, -Trp, -Val	580	DCS1041	DCS1049
CSM, -His, -Trp, -Ura	700	DCS1051	DCS1059
CSM, -Leu, -Lys, Trp	590	DCS1061	DCS1069
CSM, -Leu, -Lys, Ura	620	DCS1071	DCS1079
CSM, -Leu, -Met, -Trp	620	DCS1081	DCS1089
CSM, -Leu, -Met, -Ura	650	DCS1091	DCS1099
CSM, -Leu, -Trp, -Ura	620	DCS1101	DCS1109
CSM, -Lys, -Trp, -Ura	670	DCS1111	DCS1119
CSM, -Lys, -Tyr, -Ura	670	DCS1121	DCS1129
CSM, -Met, -Trp, -Ura	700	DCS1131	DCS1139
CSM, -Phe, -Trp, -Tyr	640	DCS1141	DCS1149
CSM, -His, -Leu, -Trp, + 20 Ade	630	DCS1151	DCS1159
CSM, -His, -Leu, -Trp, + 40 Ade	650	DCS1161	DCS1169
CSM, -His, -Leu, -Ura, + 20 Ser, + 20 Pro, + 20 Cys	710	DCS1171	DCS1179
CSM, -His, -Leu, -Trp, + 20 Ser, + 20 Pro, + 20 Cys	680	DCS1181	DCS1189

CSM QUADRUPLE DROP-OUT

Formulation	mg/l	10g	100g
CSM, -Ade, -Arg, -Leu, -Ura	610	DCS1191	DCS1199
CSM, -Ade, -Arg, -Met, -Tyr	660	DCS1201	DCS1209
CSM, -Ade, -His, -Leu, -Lys	610	DCS1211	DCS1219
CSM, -Ade, -His, -Leu, -Trp	610	DCS1221	DCS1229
CSM, -Ade, -His, -Leu, -Ura	640	DCS1231	DCS1239
CSM, -Ade, -His, -Met, -Ura	690	DCS1241	DCS1249
CSM, -Ade, -His, -Trp, -Ura	690	DCS1251	DCS1259
CSM, -Ade, -Leu, -Lys, -Trp	580	DCS1261	DCS1269
CSM, -Ade, -Leu, -Met, -Ura	640	DCS1271	DCS1279
CSM, -Ade, -Leu, -Trp, -Ura	610	DCS1281	DCS1289
CSM, -Ade, -Met, -Trp, -Ura	690	DCS1291	DCS1299
CSM, -Arg, -His, -Lys, -Ura	650	DCS1301	DCS1309
CSM, -Arg, -Leu, -Lys, -Ura	570	DCS1311	DCS1319
CSM, -Arg, -Leu, -Trp, -Ura	570	DCS1321	DCS1329

Formulation	mg/l	10g	100g
CSM, -Arg, -Lys, -Trp, -Ura	620	DCS1331	DCS1339
CSM, -Asp, -His, -Leu, -Trp	540	DCS1341	DCS1349
CSM, -His, -Leu, -Lys, -Trp	570	DCS1351	DCS1359
CSM, -His, -Leu, -Met, -Trp	600	DCS1361	DCS1369
CSM, -His, -Leu, -Lys, -Ura	600	DCS1371	DCS1379
CSM, -His, -Leu, -Trp, -Ura	600	DCS1381	DCS1389
CSM, -His, -Lys, -Trp, -Ura	650	DCS1391	DCS1399
CSM, -His, -Met, -Trp, -Ura	680	DCS1401	DCS1409
CSM, -Leu, -Lys, -Trp, -Ura	570	DCS1411	DCS1419
CSM, -Leu, -Met, -Trp, -Ura	600	DCS1421	DCS1429
CSM, -Arg, -His, -Leu, -Trp, + 20 Cys, + 20 Pro, + 20 Ser, + 20 Ura	650	DCS1431	DCS1439
CSM, -His, -Leu, -Trp, -Ura, + 20 Cys, + 20 Pro, + 20 Ser	660	DCS1441	DCS1449

CSM MULTIPLE DROP-OUT

Formulation	mg/l	10g	100g
CSM, -Ade, -Arg, -His, -Leu, -Met, -Thr, -Trp, -Ura	420	DCS1451	DCS1459
CSM, -Arg, Asp, -Ile, -Met, -Phe, -Thr, -Tyr,-Ura, -Val	230	DCS1461	DCS1469
CSM, -Ade, -His, -Leu, -Lys, -Met, -Thr, -Trp, -Tyr, -Ura	370	DCS1471	DCS1479
CSM, -Ade, -His, -Leu, -Lys, -Trp, -Tyr, -Ura	490	DCS1481	DCS1489
CSM, -Ade, -His, -Leu, -Lys, -Trp, -Ura	540	DCS1491	DCS1499
CSM, -Ade, -His, -Leu, -Met, -Trp	590	DCS1501	DCS1509
CSM, -Ade, -His, -Leu, -Met, -Trp, -Ura	570	DCS1511	DCS1519

Formulation	mg/l	10g	100g
CSM, -Ade, -His, -Leu, -Trp, -Ura	590	DCS1521	DCS1529
CSM, -Ade, -His, -Lys, -Trp, -Ura	640	DCS1531	DCS1539
CSM, -Ade, -Leu, -Lys, -Met, -Trp, -Ura	540	DCS1541	DCS1549
CSM, -Arg, -His, -Lys, -Trp, -Ura	600	DCS1551	DCS1559
CSM, -His, -Leu, -Lys, -Met, -Thr, -Trp, -Ura	430	DCS1561	DCS1569
CSM, -His, -Leu, -Lys, -Trp, -Ura	550	DCS1571	DCS1579
CSM, -His, -Leu, -Met, -Trp, -Ura	580	DCS1581	DCS1589

Store all Drop-Out mixtures dry at room temperature.

HOPKINS MIXTURE, SYNTHETIC COMPLETE SUPPLEMENT MIXTURE, (SCSM)

F. Spencer et al. Methods Companion to ME 5:173, (1993)

Hopkins Drop-Out mixtures are added to SD Broth or SD Agar.

SD media are available with glucose (dextrose), galactose, raffinose or a combination of galactose and raffinose as a carbon source.

Synthetic Complete Supplement Mixture (SCSM)

formulations are available in 30 gram pack sizes. If you would like a larger pack size, please contact us by email or telephone.

Please enquire about custom made formulations.

COMPLETE SCSM MIXTURE

SKU	Size
DSCS011	30g

Formula	mg/l
Adenine	21.0
L-Alanine	85.6
L-Arginine HCl	85.6
L-Asparagine	85.6
Aspartic Acid	85.6
L-Cysteine HCl	85.6
L-Glutamine	85.6
L-Glutamic Acid	85.6
Glycine	85.6
L-Histidine HCl	85.6
myo-Inositol	85.6
L-Isoleucine	85.6
L-Leucine	173.4
L-Lysine HCl	85.6
L-Methionine	85.6
para-Aminobenzoic Acid	8.6
L-Phenylalanine	85.6
L-Proline	85.6
L-Serine	85.6
L-Threonine	85.6
L-Tryptophan	85.6
L-Tyrosine	85.6
Uracil	85.6
L-Valine	85.6
Total	2000.6

SCSM SINGLE DROP-OUTS

Formulation	mg/l	30g
SCSM, -Ade	1979.6	DSCS021
SCSM, -Cys	1915.0	DSCS031
SCSM, -His	1915.0	DSCS041
SCSM, -Leu	1827.2	DSCS051
SCSM, -Lys	1915.0	DSCS061
SCSM, -Met	1915.0	DSCS071
SCSM, -Pro	1915.0	DSCS081
SCSM, -Trp	1915.0	DSCS091
SCSM, -Ura	1915.0	DSCS101

SCSM DOUBLE DROP-OUTS

Formulation	mg/l	30g
SCSM, -Ade, -Leu	1806.2	DSCS111
SCSM, -Ade, -Lys	1894.0	DSCS121
SCSM, -Ade, -Trp	1894.0	DSCS131
SCSM, -Cys, -Met	1829.4	DSCS141
SCSM, -His, -Leu	1741.6	DSCS151
SCSM, -His, -Ura	1829.4	DSCS161
SCSM, -Leu, -Trp	1741.6	DSCS171
SCSM, -Leu, -Ura	1741.6	DSCS181
SCSM, -Met, -Ura	1829.4	DSCS191
SCSM, -Trp, -Ura	1829.4	DSCS201
SCSM, -Ura, -Inositol	1829.4	DSCS211

SCSM TRIPLE DROP-OUTS

Formulation	mg/l	30g
SCSM, -Cys, -His, -Met	1743.8	DSCS221
SCSM, -Cys, -Met, -Ura	1743.8	DSCS231
SCSM, -His, -Leu, -Trp	1656.0	DSCS241
SCSM, -His, -Leu, -Ura	1656.0	DSCS251
SCSM, -His, -Trp, -Ura	1743.8	DSCS261

SCSM QUADRUPLE DROP-OUTS

Formulation	mg/l	30g
SCSM, -Ade, -His, -Leu, -Trp	1635.0	DSCS271
SCSM, -His, -Leu, -Trp, -Ura	1570.4	DSCS281

SCSM MULTIPLE DROP-OUTS

Formulation	mg/l	30g
SCSM, -Ade, -His, -Leu, -Lys, -Trp, -Ura	1463.8	DSCS291
SCSM, -Cys, -Leu, -Lys, -Met, -Trp, -Ura	1399.2	DSCS301
SCSM, -Ade, -Arg, -His, -Leu, -Met, -Thr, -Trp, -Ura	1292.6	DSCS311

Store all Drop-Out mixtures dry at room temperature

KAISER MIXTURE, SYNTHETIC COMPLETE DROP-OUT MIXTURE, (SC)

Ref.: Kaiser, C. et al., Methods in Yeast Genetics, Cold Spring harbour (New York : 1994).

Drop-Out supplements are based upon a standard mixture of Amino Acids, Vitamins and other components to supplement encountered auxothropies. In each of the Drop-Out mixtures provided by Formedium™each of these components is provided except one to five supplements of interest, i.e. the “dropped out” supplements.

Drop-Out mixtures are often used in combination with Yeast Nitrogen Base without Amino Acids to test for auxothropies and transformants.

Each of the Drop-Out mixtures, without one or more essential nutrients, is useful for the selection of auxotrophic requirements and transformants.

Synthetic Complete Amino Acid supplements are available in 20 gram and 100 gram pack sizes. Please contact us if you would like to order or get a quotation for a larger pack size.

COMPLETE SC MIXTURE

Formula	mg/l
Adenine	18
L-Alanine	76
L-Arginine HCl	76
L-Asparagine	76
Aspartic Acid	76
L-Cysteine	76
L-Glutamine	76
L-Glutamic Acid	76
Glycine	76
L-Histidine	76
myo-Inositol	76
L-Isoleucine	76
L-Leucine	380
L-Lysine	76
L-Methionine	76
para-Aminobenzoic Acid	8
L-Phenylalanine	76
L-Proline	76
L-Serine	76
L-Threonine	76
L-Tryptophan	76
L-Tyrosine	76
Uracil	76
L-Valine	76
Total	2002

COMPLETE SC MIXTURE

Formulation	mg/l	20g	100g
SC	2002	DSCK012	DSCK1000

SC SINGLE DROP-OUTS

Formulation	mg/l	20g	100g
SC, -Ade	1984	DSCK022	DSCK1001
SC, -Cys	1926	DSCK032	DSCK1002
SC, -His	1926	DSCK042	DSCK1003
SC, -Leu	1622	DSCK052	DSCK1004
SC, -Lys	1926	DSCK062	DSCK1005
SC, -Met	1926	DSCK072	DSCK1006
SC, -Pro	1926	DSCK082	DSCK1007
SC, -Trp	1926	DSCK092	DSCK1008
SC, -Ura	1926	DSCK102	DSCK1009

SC DOUBLE DROP-OUTS

Formulation	mg/l	20g	100g
SC, -Ade, -Leu	1604	DSCK112	DSCK1010
SC, -Ade, -Lys	1908	DSCK122	DSCK1011
SC, -Ade, -Trp	1908	DSCK132	DSCK1012
SC, -Cys, -Met	1850	DSCK142	DSCK1013
SC, -His, -Leu	1546	DSCK152	DSCK1014
SC, -His, -Ura	1850	DSCK162	DSCK1015
SC, -Leu, -Trp	1546	DSCK172	DSCK1016
SC, -Leu, -Ura	1546	DSCK182	DSCK1017
SC, -Met, -Ura	1850	DSCK192	DSCK1018
SC, -Trp, -Ura	1850	DSCK202	DSCK1019
SC, -Ura, -Inositol	1850	DSCK212	DSCK1020

SC TRIPLE DROP-OUTS

Formulation	mg/l	20g	100g
SC, -Cys, -His, -Met	1774	DSCK222	DSCK1001
SC, -Cys, -Met, -Ura	1774	DSCK232	DSCK1422
SC, -His, -Leu, -Trp	1470	DSCK242	DSCK1023
SC, -His, -Leu, -Ura	1470	DSCK252	DSCK1024
SC, -His, -Trp, -Ura	1774	DSCK262	DSCK1025
SC, -Leu, -Trp, -Ura	1470	DSCK265	DSCK1035

SC QUADRUPLE DROP-OUTS

Formulation	mg/l	20g	100g
SC, -Ade, -His, -Leu, -Trp	1452	DSCK272	DSCK1026
SC, -His, -Leu, -Trp, -Ura	1394	DSCK282	DSCK1027

SC MULTIPLE DROP-OUTS

Formulation	mg/l	20g	100g
SC, -Ade, -His, -Leu, -Lys, -Trp, -Ura	1300	DSCK292	DSCK1028
SC, -Cys, -Leu, -Lys, -Met, -Trp, -Ura	1242	DSCK302	DSCK1029
SC, -Ade, -Arg, -His, -Leu, -Met, -Thr, -Trp, -Ura	1148	DSCK312	DSCK1030

Store all Drop-Out mixtures dry at room temperature

BRENT SUPPLEMENT MIXTURE, (BSM)

Brent Supplement Mixture (BSM) is used in combination with the Interaction Trap two-hybrid system.

BSM Drop-Out mixtures are added to SD Broth or SD Agar.

SD media are available with glucose (dextrose), galactose, raffinose, or a combination of galactose and raffinose as a carbon source.

Brent Supplement Mixture formulations are available in 25 gram pack sizes. If you would like a quotation for a larger pack size, please contact us.

Please enquire about custom made formulations.

COMPLETE BSM MIXTURE

SKU	Size
DBSM012	25g

Formula	mg/l
Adenine	40
L-Arginine HCl	20
L-Aspartic Acid	100
Glutamic Acid	100
L-Histidine	20
L-Isoleucine	300
L-Leucine	60
L-Lysine HCl	30
L-Methionine	20
L-Phenylalanine	50
L-Serine	375
L-Threonine	200
L-Tryptophan	40
L-Tyrosine	30
Uracil	20
Valine	150
Total	1555

BSM SINGLE DROP-OUTS

Formulation	mg/l	25g
BSM, -His	1535	DBSM022
BSM, -Trp	1515	DBSM032
BSM, -Ura	1535	DBSM042

BSM DOUBLE DROP-OUTS

Formulation	mg/l	25g
BSM, -His, -Ura	1515	DBSM052
BSM, -Leu, -Trp	1455	DBSM062
BSM, -Trp, -Ura	1495	DBSM072

BSM MULTIPLE DROP-OUTS

Formulation	mg/l	25g
BSM, His, -Leu, -Ura	1455	DBSM082
BSM, -His, -Trp, -Ura	1475	DBSM092
BSM, -Leu, -Trp, -Ura	1435	DBSM102
BSM, -his, -Leu, -Trp, -Ura	1415	DBSM112

Store all Drop-Out mixtures dry at room temperature

HOLLENBERG SUPPLEMENT MIXTURE, (HSM)

Hollenberg Supplement Mixture (HSM) is used for this selection in the two hybrid system of Field as modified by Hollenberg.

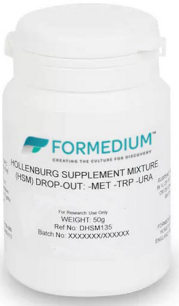
HSM Drop-Out mixtures are added to SD media with succinate as the carbon source.

Hollenburg Supplement Mixture formulations are available in 50 gram pack sizes. If you would like a quotation for a larger pack size, please contact us.

Please enquire about custom made formulations.

Store all Drop-Out mixtures dry at room temperature.

Formula	mg/l
Adenine	100
L-Arginine	100
L-Aspartic Acid	50
Cysteine	100
L-Histidine	50
L-Isoleucine	50
L-Leucine	100
L-Lysine	100
L-Methionine	50
L-Phenylalanine	50
L-proline	50
L-Serine	50
L-Threonine	100
L-Tryptophan	100
L-Tyrosine	50
Uracil	100
Valine	50
Total	1250



HSM SINGLE DROP-OUTS

Formulation	mg/l	50g
HSM, -His	1200	DHSM015
HSM,-Leu	1150	DHSM025
HSM, -Lys	1150	DHSM035
HSM, -Trp	1150	DHSM045
HSM, -Ura	1150	DHSM055

HSM DOUBLE DROP-OUTS

Formulation	mg/l	50g
HSM, -Leu, -Trp	1050	DHSM065
HSM, -Trp, -Ura	1050	DHSM075
HSM, -Leu, -Ura	1050	DHSM085

HSM TRIPLE DROP-OUTS

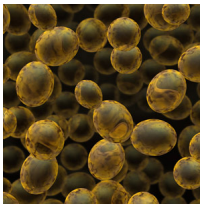
Formulation	mg/l	50g
HSM, -His, -Leu, -Trp	1000	DHSM095
HSM, -His, -Leu, -Ura	1000	DHSM105
HSM, -His, -Lys, -Ura	1000	DHSM115
HSM, -His, -Trp, -Ura	1000	DHSM125
HSM, -Met, -Trp, -Ura	1000	DHSM135
HSM, -Leu, -Trp, -Ura	950	DHSM145

HSM MULTIPLE DROP-OUTS

Formulation	mg/l	50g
HSM, -His, -Leu, -Trp, -Ura	900	DHSM155
HSM, -His, -Lys, -Trp, -Ura	900	DHSM165
HSM, -His, -Leu,-Lys, -Trp,-Ura	900	DHSM175
HSM, -Ade, -His, -Leu, -Lys, -Met, -Trp, -Ura	900	DHSM185

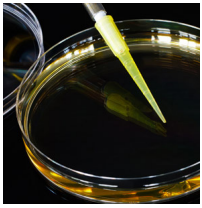
Store all Drop-Out mixtures dry at room temperature

SCHIZOSACCHAROMYCES POMBE



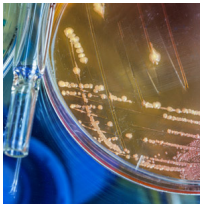
Besides Saccharomyces Cerevisiae, Schizosaccharomyces Pombe, a fission yeast, is the other commonly studied yeast. Schizosaccharomyces Pombe is different from Saccharomyces Cerevisiae in a way that it has a typical eukaryotic cell cycle with discrete G1, G2 and M phases. Another difference is it's chromosome structure and RNA processing that are much closer to the systems present in mammalian cells compared to Saccharomyces Cerevisiae.

Schizosaccharomyces Pombe is isolated from Pombe (an East African Millet beer). The size of it's genome is about 14 Mb containing approximately 7000 genes arranged in three distinct genomes.



Schizosaccharomyces Pombe has two mating types, h+ and h-, and is stable as a haploid or diploid. The most commonly auxotrophic markers used with Schizosaccharomyces Pombe are; Ade, Glu, His, Leu, Lys and Ura. Homologous recombination of Schizosaccharomyces Pombe is less efficient compared to Saccharomyces Cerevisiae. Conjugation and sporulation can only take place when starved for nutrients.

Formedium™ is producing a large range of media for the cultivation of Schizosaccharomyces Pombe. Fission yeast like Schizosaccharomyces Pombe can can be grown on Saccharomyces Cerevisiae media like YPD for general culturing purposes, however, the cells are not as happy on Peptone (the P in YPD).



Therefore YPD (Yeast Extract, Peptone and Dextrose) is often replaced by media like YES in which Peptone is omitted or YSO in which Peptone is replaced by Casamino Acids.

Many of the Schizosaccharomyces Pombe media contain 30 gram/litre of Dextrose (glucose.H2O) compared to the Saccharomyces Cerevisiae media with 20 gram/litre of Dextrose. To prevent caramelization of Glucose during autoclavation it is essential to mix the powdered media in water for 5 minutes in order to dissolve the Glucose completely. Autoclavation is recommended at 15 psi for 15 minutes or 10 psi for 20 minutes. Filter sterilization is a good alternative as well.

Formedium™ is producing four groups of media formulations for the cultivation of Schizosaccharomyces Pombe.

S. Moreno, A. Klar, and P. Nurse. (1991). Molecular genetic analysis of the fission yeast Schizosaccharomyces pombe. Methods Enzymol. 194: 795-823.
Nasim, A., Young, P. and Johnson, B.F., eds. (1989) Molecular Biology of the Fission Yeasts. Academic Press Inc., NY.

COMPLEX MEDIA

ME AGAR

SKU	Size
PCM0802	250g
PCM0805	500g
PCM0810	1000g

(Malt extract, Agar, Amino acid supplement w/o L-Lysine HCl)

Formula	g/l
Malt Extract	30
Agar	17
Adenine	0.05
L-Histidine	0.05
L-Leucine	0.05
Uracil	0.05
Total	47.20

Suspend 47.2 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

ME BROTH

SKU	Size
PCM0702	250g
PCM0705	500g
PCM0710	1000g

(Malt extract, Amino acid supplement w/o L-Lysine HCl)

Formula	g/l
Malt Extract	30
Adenine	0.05
L-Histidine	0.05
L-Leucine	0.05
Uracil	0.05
Total	30.20

Suspend 30.20 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YE AGAR

SKU	Size
PCM0202	250g
PCM0205	500g
PCM0210	1000g
PCM0250	5000g
PCM0255	15kg

(Yeast extract, Glucose and Agar)

Formula	g/l
Yeast extract	5
Dextrose	30
Agar	17
Total	52

Suspend 35.00 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YE BROTH

SKU	Size
PCM0102	250g
PCM0105	500g
PCM0110	1000g
PCM0150	5000g
PCM0155	15kg

(Yeast extract, Glucose)

Formula	g/l
Yeast extract	5
Dextrose	30
Total	35

Suspend 35.00 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YES AGAR

SKU	Size
PCM0402	250g
PCM0405	500g
PCM0410	1000g
PCM0450	5000g

(Yeast extract, Glucose, Agar, Amino acid supplement)

Formula	g/l
Yeast extract	5
Dextrose	30
Agar	17
Adenine	0.05
L-Histidine	0.05
L-Leucine	0.05
L-Lysine HCl	0.05
Uracil	0.05
Total	52.25

Suspend 52.25 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YES BROTH

SKU	Size
PCM0302	250g
PCM0305	500g
PCM0310	1000g
PCM0350	5000g
PCM0355	15kg

(Yeast extract, Glucose, Amino acid supplement)

Formula	g/l
Yeast extract	5
Dextrose	30
Adenine	0.05
L-Histidine	0.05
L-Leucine	0.05
L-Lysine HCl	0.05
Uracil	0.05
Total	35.25

Suspend 35.25 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YSO AGAR

SKU	Size
PCM0602	250g
PCM0605	500g
PCM0610	1000g
PCM0650	5000g

(Casamino acids, Glucose, Agar, Amino acid supplement w/o Adenine)

Formula	g/l
Dextrose	30
Casamino acids	2
Agar	17
L-Histidine	0.05
L-Leucine	0.05
L-Lysine HCl	0.05
Uracil	0.05
Total	49.20

Suspend 49.20 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

YSO BROTH

SKU	Size
PCM0502	250g
PCM0505	500g
PCM0510	1000g
PCM0550	5000g

(Casamino acids, Glucose, Amino acid supplement w/o Adenine)

Formula	g/l
Dextrose	30
Casamino acids	2
L-Histidine	0.05
L-Leucine	0.05
L-Lysine HCl	0.05
Uracil	0.05
Total	32.20

Suspend 32.20 gram powdered medium in 1 litre distilled water. Store dry at room temperature.

MINIMAL DEFINED MEDIA

Schizosaccharomyces Pombe Minimal Defined Media

View technical data on pages 122 - 123.

EMM AGAR

SKU	Size
PMD0101	100g
PMD0102	250g
PMD0105	500g
PMD0110	1000g
PMD0150	5000g
PMD0155	15kg

EMM containing Dextrose, Minerals, Trace elements, Vitamins and Agar without Amino Acids.

For technical data please see pages 122 - 123.

Suspend 49.3 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

EMM AGAR LOW DEXTROSE, 5 G/L

SKU	Size
PMD0501	100g
PMD0502	250g
PMD0505	500g
PMD0510	1000g

EMM containing Dextrose, Minerals, Trace elements, Vitamins and Agar without Amino Acids.

For technical data please see pages 122 - 123.

Suspend 34.3 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

EMM AGAR PLUS 1 X SP SUPPLEMENTS, -LEU, -URA

SKU	Size
PMD0701	100g
PMD0702	250g
PMD0705	500g
PMD0710	1000g

EMM containing 0.15 g SP supplements (Ade, His and Lys), Dextrose, Minerals, Trace elements, Vitamins and Agar.

For technical data please see pages 122 - 123.

GHS07 Skin & Eye Irritation

Suspend 49.5 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

EMM AGAR WITHOUT DEXTROSE

SKU	Size
PMD0301	100g
PMD0302	250g
PMD0305	500g
PMD0310	1000g

EMM containing Minerals, Trace elements, Vitamins and Agar without Dextrose and Amino Acids.

For technical data please see pages 122 - 123.

Suspend 29.3 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

EMM AGAR WITHOUT NITROGEN

SKU	Size
PMD1201	100g
PMD1202	250g
PMD1205	500g
PMD1210	1000g

EMM containing Dextrose, Minerals, Trace elements, Vitamins and Agar without NH4Cl and Amino acids.

For technical data please see pages 122 - 123.

Suspend 44.3 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

EMM AGAR WITHOUT PHOSPHATES

SKU	Size
PMD1001	100g
PMD1002	250g
PMD1005	500g
PMD1010	1000g

EMM containing Dextrose, Minerals, Trace elements, Vitamins and Agar without NaH2PO4 and Amino acids.

For technical data please see pages 122 - 123.

Suspend 47.1 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

EMM BROTH

SKU	Size
PMD0201	100g
PMD0202	250g
PMD0205	500g
PMD0210	1000g
PMD0250	5000g
PMD0255	15kg

EMM containing Dextrose, Minerals, Trace elements and Vitamins without Agar and Amino Acids.

For technical data please see pages 122 - 123.

Suspend 32.3 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

EMM BROTH LOW DEXTROSE, 5 G/L

SKU	Size
PMD0601	100g
PMD0602	250g
PMD0605	500g
PMD0610	1000g

EMM containing Dextrose, Minerals, Trace elements and Vitamins without Agar and Amino Acids.

For technical data please see pages 122 - 123.

Suspend 17.3 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

EMM BROTH PLUS 1 X SP SUPPLEMENTS, -LEU, -URA

SKU	Size
PMD0801	100g
PMD0802	250g
PMD0805	500g
PMD0810	1000g

EMM containing 0.15 g SP supplements (Ade, His and Lys), Dextrose, Minerals, Trace elements and Vitamins without Agar.

For technical data please see pages 122 - 123.

GHS07 Skin & Eye Irritation

Suspend 32.5 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

EMM BROTH WITHOUT DEXTROSE

SKU	Size
PMD0401	100g
PMD0402	250g
PMD0405	500g
PMD0410	1000g

EMM containing Minerals, Trace elements, Vitamins without Dextrose, Agar and Amino Acids.

For technical data please see pages 122 - 123.

Suspend 12.3 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

EMM BROTH WITHOUT NITROGEN

SKU	Size
PMD1301	100g
PMD1302	250g
PMD1305	500g
PMD1310	1000g

EMM containing Dextrose, Minerals, Trace elements & Vitamins without NH4Cl, Agar & Amino acids.

For technical data please see pages 122 - 123.

Suspend 27.3 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

EMM BROTH WITHOUT PHOSPHATES

SKU	Size
PMD1101	100g
PMD1102	250g
PMD1105	500g
PMD1110	1000g

EMM containing Dextrose, Minerals, Trace elements and Vitamins without NaH2PO4 and Agar.

For technical data please see pages 122 - 123.

Suspend 30.1 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

EMM GLUTAMATE AGAR

SKU	Size
PMD2101	100g
PMD2102	250g
PMD2105	500g
PMD2110	1000g
PMD2150	5kg
PMD2155	15kg

Ammonium Chloride (5 g/l) is replaced by Glutamate (3.75 g/l) as a Nitrogen source in EMM Glutamate Agar. EMM Glutamate Agar contains Dextrose, Minerals, Trace elements, Vitamins and Agar and is without Amino Acids.

For technical data please see pages 122 - 123.

Suspend 48.0 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

EMM GLUTAMATE BROTH

SKU	Size
PMD1801	100g
PMD1802	250g
PMD1805	500g
PMD1810	1kg
PMD1850	5kg
PMD1855	15kg

Ammonium Chloride (5 g/l) is replaced by Glutamate (3.75 g/l) as a Nitrogen source in EMM Glutamate Broth. EMM Glutamate Broth contains Dextrose, Minerals, Trace elements, Vitaminsand is without Amino Acids.

For technical data please see pages 122 - 123.

Suspend 31.0 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

EMMS

SKU	Size
PMD0910	1000g

EMM containing 218.6 g/l Sorbitol (1.2 M), Dextrose, Minerals, Trace elements and Vitamins without Agar and Amino Acids.

For technical data please see pages 122 - 123.

Suspend 250.9 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

GHS07 Skin & Eye Irritation

MB AGAR

SKU	Size
PMD1401	100g
PMD1402	250g
PMD1405	500g
PMD1410	1000g

MB containing Dextrose, Minerals, Trace elements, Vitamins, Agar and Amino acids.

For technical data please see pages 122 - 123.

Suspend 28.9 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

MB BROTH

SKU	Size
PMD1501	100g
PMD1502	250g
PMD1505	500g
PMD1510	1000g

MB containing Dextrose, Minerals, Trace elements and Vitamins without Agar.

For technical data please see pages 122 - 123.

Suspend 11.6 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

MB BROTH WITHOUT AMINO ACIDS

SKU	Size
PMD1701	100g
PMD1702	250g
PMD1705	500g
PMD1710	1kg

MB containing Dextrose, Minerals, Trace elements and Vitamins without Agar.

For technical data please see pages 122 - 123.

Suspend 11.6 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

MMA AGAR MEDIUM

SKU	Size
PMD1601	100g
PMD1602	250g
PMD1605	500g
PMD1610	1000g

EMM containing Dextrose, Minerals, Trace elements and Vitamins without NaH2PO4 and Agar.

For technical data please see pages 122 - 123.

Suspend 33.7 gram powdered medium in 1 litre distilled water. Store dry at 0°C.

SP SUPPLEMENTS

Schizosaccharomyces Pombe Supplements

A basic mixture of Ade, His, Leu, Lys and Ura and it's derived formulations.

SP SUPPLEMENTS

SKU	Size
PSU0101	10g
PSU0110	100g

Formula	g/l
Adenine	50
L-Histidine HCl	50
L-Leucine	50
L-Lysine HCl	50
Uracil	50

Suspend 0.25 gram in 1 litre distilled water for 1X supplements. Add 2 - 4x for auxotrophs or slower growing strains. Store dry at room temperature.

SP SUPPLEMENTS, -LEU, -URA

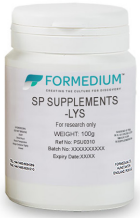
SKU	Size
PSU0201	10g
PSU0210	100g

Formula	g/l
Adenine	50
L-Histidine HCl	50
L-Lysine HCl	50

Suspend 0.15 gram in 1 litre distilled water for 1X supplements.

SP SUPPLEMENTS, -LYS

SKU	Size
PSU0301	10g
PSU0310	100g



Formula	g/l
Adenine	50
L-Histidine HCl	50
L-Leucine	50
Uracil	50

Suspend 0.2 gram in 1 litre distilled water for 1X supplements. Add 2 - 4x for auxotrophs or slower growing strains. Store dry at room temperature.

AMINO ACIDS AND VITAMINS

Formedium™ offers a large range of Amino Acids and Vitamins to formulate several Drop-Out supplement mixtures as described by different authors.

Amino Acids & VitaminsThis range of products enable users to compose Drop-Out supplements according lab specifications.

All Amino Acids and Vitamins are of pharmaceutical grade and are ranked amongst the best quality available.

The Amino Acids and Vitamins offered are used in Formedium™ Drop-Out supplement mixtures and powdered media productions.

Pack sizes vary from 5 gram to 100 gram, offering the possibility to compose a kit to select for an optimal Amino Acid and Vitamin composition. To buy in larger quantities, in case of large media preparations, please email us or call us.

ADENINE SULPHATE

SKU	Size
DOC0228	5g
DOC0229	25g
DOC0230	100g

Chemical formula	C10H12N10O4S.2H2O
Solubility	Soluble in water
Mol. Weight	404.3
Assay	≥99%

GHS07 Skin & Eye Irritation

D(+)-BIOTIN

SKU	Size
DOC0202	1g
DOC0203	5g

Chemical formula	C10H16N2O3S
Solubility (20° C)	0.2 g/l
Mol. Weight	244.31
pH (100 g/l)	4.5 (0.1 g/l)
Assay	≥99%

GLYCINE

SKU	Size
DOC0138	5g
DOC0139	10g
DOC0140	25g
DOC0141	100g

Chemical formula	C2H5NO2
Solubility (20° C)	225 g/l
Mol. Weight	75.07
pH (100 g/l)	5.9-6.4 (50 g/l)
Assay	≥99%

INOSITOL

SKU	Size
DOC0198	5g
DOC0199	10g
DOC0200	25g
DOC0201	100g

Chemical formula	C6H12O6
Solubility (20° C)	250 g/l
Mol. Weight	180.16
pH (100 g/l)	5.0-7.0 (100 g/l)
Assay	≥99%

L-ALANINE

SKU	Size
DOC0102	5g
DOC0103	10g
DOC0104	25g
DOC0105	100g

Chemical formula	C3H7NO2
Solubility (20° C)	166.5 g/l
Mol. Weight	89.09
pH (100 g/l)	5.5 - 6.5 (100 g/l)
Assay	≥99%

L-ARGININE

SKU	Size
DOC0106	5g
DOC0107	10g
DOC0108	25g
DOC0109	100g

Chemical formula	C6H14N4O2
Solubility (20° C)	148.7 g/l
Mol. Weight	174.20
pH (100 g/l)	11.4 (100 g/l)
Assay	≥99%

L-ASPARAGINE MONOHYDRATE

SKU	Size
DOC0114	5g
DOC0115	10g
DOC0116	25g
DOC0117	100g

Chemical formula	C4H8N2O3H2O
Solubility (20° C)	22 g/l
Mol. Weight	150.14
pH (100 g/l)	4.0-5.0 (20 g/l)
Assay	≥99%

L-ASPARTIC ACID

SKU	Size
DOC0118	5g
DOC0119	10g
DOC0120	25g
DOC0121	100g

Chemical formula	C4H7NO4
Solubility (20° C)	4 g/l
Mol. Weight	133.10
pH (100 g/l)	2.5-3.5 (4 g/l)
Assay	≥99%

L-CYSTEINE

SKU	Size
DOC0122	5g
DOC0123	10g
DOC0124	25g
DOC0125	100g

Chemical formula	C3H7NO2S
Solubility (20° C)	160 g/l
Mol. Weight	121.16
pH (100 g/l)	4.5-5.5 (100 g/l)
Assay	≥99%

L-GLUTAMIC ACID

SKU	Size
DOC0134	5g
DOC0135	10g
DOC0136	25g
DOC0137	100g

Chemical formula	C5H9NO4
Solubility (20° C)	11.1 g/l
Mol. Weight	147.13
pH (100 g/l)	3.0-3.5 (8.6 g/l)
Assay	≥99%

L-GLUTAMINE

SKU	Size
DOC0130	5g
DOC0131	10g
DOC0132	25g
DOC0133	100g

Chemical formula	C5H10N2O3
Solubility (20° C)	26 g/l
Mol. Weight	146.15
pH (100 g/l)	4.5-5.5 (50 g/l)
Assay	≥98%

L-HISTIDINE

SKU	Size
DOC0142	5g
DOC0143	10g
DOC0144	25g
DOC0145	100g

Chemical formula	C6H9N3O2
Solubility (20° C)	38.2 g/l
Mol. Weight	155.16
pH (100 g/l)	7.7 (10 g/l)
Assay	≥99%

L-ISOLEUCINE

SKU	Size
DOC0150	5g
DOC0151	10g
DOC0152	25g
DOC0153	100g

Chemical formula	C6H13NO2
Solubility (20° C)	40 g/l
Mol. Weight	131.17
pH (100 g/l)	5.5-6.5 (40 g/l)
Assay	≥99%

L-LEUCINE

SKU	Size
DOC0154	5g
DOC0155	10g
DOC0156	25g
DOC0157	100g

Chemical formula	C6H13NO2
Solubility (20° C)	24 g/l
Mol. Weight	131.18
pH (100 g/l)	5.5-6.5 (20 g/l)
Assay	≥99%

L-LYSINE

SKU	Size
DOC0158	5g
DOC0159	10g
DOC0160	25g
DOC0161	100g

Chemical formula	C6H14N2O2H2O
Solubility (20° C)	300 g/l
Mol. Weight	164.21
Assay	≥99%

L-METHIONINE

SKU	Size
DOC0166	5g
DOC0167	10g
DOC0168	25g
DOC0169	100g

Chemical formula	C5H11NO2S
Solubility (20° C)	48 g/l
Mol. Weight	149.21
pH (100 g/l)	5.0-7.0 (10 g/l)
Assay	≥99%

L-PHENYLALANINE

SKU	Size
DOC0170	5g
DOC0171	10g
DOC0172	25g
DOC0173	100g

Chemical formula	C9H11NO2
Solubility (20° C)	27 g/l
Mol. Weight	165.19
pH (100 g/l)	5.8 (10 g/l)
Assay	≥99%

L-PROLINE

SKU	Size
DOC0174	5g
DOC0175	10g
DOC0176	25g
DOC0177	100g

Chemical formula	C5H9NO2
Solubility (20° C)	1500 g/l
Mol. Weight	115.13
pH (100 g/l)	5.0-7.0 (10 g/l)
Assay	≥99%

L-SERINE

SKU	Size
DOC0178	5g
DOC0179	10g
DOC0180	25g
DOC0181	100g

Chemical formula	C3H7NO3
Solubility (20° C)	270 g/l
Mol. Weight	105.09
pH (100 g/l)	5.0-6.0 (50 g/l)
Assay	≥99%

L-THREONINE

SKU	Size
DOC0182	5g
DOC0183	10g
DOC0184	25g
DOC0185	100g

Chemical formula	C4H9NO3
Solubility (20° C)	90 g/l
Mol. Weight	119.12
pH (100 g/l)	5.0-6.0 (100 g/l)
Assay	≥99%

L-TRYPTOPHAN

SKU	Size
DOC0186	5g
DOC0187	10g
DOC0188	25g
DOC0189	100g

Chemical formula	C11H12N2O2
Solubility (20° C)	10 g/l
Mol. Weight	204.23
pH (100 g/l)	5.5-7.0 (10 g/l)
Assay	≥99%

L-TYROSINE

SKU	Size
DOC0190	5g
DOC0191	10g
DOC0192	25g
DOC0193	100g

Chemical formula	C9H11NO3
Solubility (20° C)	0.38 g/l
Mol. Weight	181.19
pH (100 g/l)	6.5 (0.1 g/l)
Assay	≥99%

L-VALINE

SKU	Size
DOC0194	5g
DOC0195	10g
DOC0196	25g
DOC0197	100g

Chemical formula	C5H11NO2
Solubility (20° C)	85 g/l
Mol. Weight	117.15
pH (100 g/l)	5.5-6.5 (100 g/l)
Assay	≥99%

PARA-AMINOBENZOIC ACID

SKU	Size
DOC0204	5g
DOC0205	10g
DOC0206	25g
DOC0207	100g

Chemical formula	C7H7NO2
Solubility (20° C)	4.7 g/l
Mol. Weight	137.14
pH (100 g/l)	3.5 (5 g/l)
Assay	≥99%

GHS07 Skin & Eye Irritation

URACIL

SKU	Size
DOC0212	5g
DOC0213	25g
DOC0214	100g

Chemical formula	C4H4N2O2
Solubility (20° C)	Soluble in water
Mol. Weight	112.09
Assay	≥99%

GHS07 Skin & Eye Irritation

ANTIBIOTICS

AMPICILLIN SODIUM SALT

SKU	Size
AMP05	5g
AMP10	10g
AMP25	25g
AMP50	50g
AMP100	100g

C16H18N3O4SNa=371.4

Specifications	
USP 25, Ph. Eur.	Value

Store dry at 2-8°C
Soluble in water
Hygroscopic, protect against moisture
CAS 69-52-3

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

GHS07 Skin & Eye Irritation

CARBENICILLIN DISODIUM

SKU	Size
CAR0005	5g
CAR0025	25g

C17H16N2Na2O6S=422.4

Store dry at 2-8°C
Soluble in water
Hygroscopic, protect against moisture
CAS 4800-94-6

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

CEFOTAXIME SODIUM

SKU	Size
CEFO001	1g
CEFO005	5g
CEFO025	25g

C16H16N5NaO7S2=477.4

Store dry at 2-8°C
Keep container tightly closed and protect from light
Soluble in water
CAS 64485-93-4

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

CHLORAMPHENICOL

SKU	Size
CLA01	25g
CLA02	100g

C11H12Cl2N2O5=323.1

Store dry at room temperature
Slightly soluble in water (2.5 g/L)
Soluble in ethanol
CAS 56-75-7

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

DOXYCYCLINE HYCLATE

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

GHS07 Skin & Eye Irritation

SKU	Size
DOX01	1g
DOX05	5g
DOX10	10g
DOX25	25g
DOX100	100g

C22H24N2O8·HCl·0.5H2O·0.5C2H6O = 512.94

Doxycycline is a bacteriostatical Tetracycline like antibiotic. The antibiotic is effective against both gram-positive and gram-negative bacteria. It binds reversible to the ribosomal 30 S unit, preventing binding of aminoacyl transfer RNA and hence inhibiting protein synthesis.

Doxycycline is an effective repressor of the TetO7 promoter system.

Media containing 10 micro-gram Doxycycline effectively repress the TetO7 promoter.

Specifications	
Doxycycline Hyclate Doxycycline hydrochloride hemi-ethanolate hemihydrate	
Assay	>98%

Store dry at 2-8°C. Soluble in water
Protect against light. CAS 24390-14-5

ERYTHROMYCIN

SKU	Size
ERYT005	5g
ERYT010	10g
ERYT025	25g
ERYT100	100g

Erythromycin is a macrolide antibioticum with a bacteriostatic action against primarily gram-positive bacteria. The antibiotic binds reversibly to the 50S subunit of the bacterial ribosome, resulting in inhibition of both transpeptidation and translocation reactions, inhibition of protein synthesis and hence inhibition of cell growth.

Specifications	
Physical description	White or pale yellow powder
Identification	According to BP
Specific optical rotation	-71 to -78°
Related substances	Any individual impurity: <= 3.0% Total Impurities: <= 7.0%
Thiocyanate	<= 0.3%
Water	<= 6.5%
Sulphated Ash	<= 0.2%
Assay	Erythromycin A+B+C: 93.0 – 102.0% Erythromycin B: <= 5.0% Erythromycin C: <-5.0%
Pharmacopoeia	
Specification(s)	BP

Store dry at 4-8°C.
CAS 114-07-8

G-418 DISULPHATE

SKU	Size
G4181	1g
G4185	5g

C20H40N4O10.2H2SO4=692.7

G-418 is a member of the large family of Aminoglycoside antibiotics and has a molecular structure almost like Gentamycin. The antibiotic is an irreversible inhibitor of protein synthesis. Due to its structure is capable of binding to both prokaryotic and eukaryotic ribosomes and inhibiting protein synthesis and generating errors in the transcription of the genetic code.

G-418 can by inactivated by NPTII or 3APH. The hydroxyl group present at the 3 position of G-418 is phosphorylated by NPTII. The resulting steriometric change of the molecular structure of the antibiotic prevents it from binding at its ribosome binding site.

Specifications	
Character	Fine white powder
Solubility	Freely soluble in water
Specific Optical Rotation	+104 ~ +121
Water	<6%
Absorbance 570 nm	<0.10
Absorbance 280 nm	<0.015
NH4+	< 1.0%
pH	5.5 ± 0.5
Thin Layer Chromatogram	One Spot
Potency	>720 µ/mg

Store at 2 - 8°C. Protect from light
CAS 108321-42-2


Hyrgoscopic - do not breathe dust
GHS08 - GHS09


GHS07 Skin & Eye Irritation

G-418 SOLUTION

SKU	Size
G418S	20ml
G4185S	5 x 20ml

C20H40N4O10.2H2SO4=692.7

G-418 is a member of the large family of Aminoglycoside antibiotics and has a molecular structure almost like Gentamycin. The antibiotic is an irreversible inhibitor of protein synthesis. Due to its structure is capable of binding to both prokaryotic and eukaryotic ribosomes and inhibiting protein synthesis and generating errors in the transcription of the genetic code.

1 Bottle contains 20 ml G-418 Solution 50 mg/ml.

Store at 4°C. CAS 108321-42-2

Specifications	
Solubility	Freely soluble in water
Specific Optical Rotation	+104 ~ +121
Water	<6%
Absorbance 570 nm	<0.10
Absorbance 280 nm	<0.015
NH4+	< 1.0%
pH	5.5 ± 0.5
Thin Layer Chromatogram	One Spot

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

GHS07 Skin & Eye Irritation

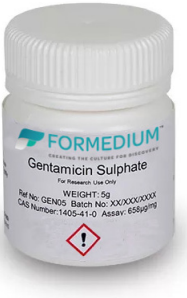
Specifications	
Potency	>720 µ/mg
Water Purity Used	
Resistivity at 25°C.	18.2 M
Bacterial endotoxin	<0.001 EU/ml
TOC	1-3 ppb
Bacteria	< 0.1 CFU/ml
Bacterial endotoxin	< 0.001/ml
RNase and DNase	Removed

GENTAMICIN SULPHATE

SKU	Size
GEN05	5g
GEN25	25g

Specifications	
Potency	Approximately 640 µ/mg

Store dry at room temperature. Soluble in water
CAS 1405-41-0



GHS07 Skin & Eye Irritation

HYGROMYCIN B (POWDER)

SKU	Size
HYG0500	500mg
HYG1000	1g
HYG5000	5g

C20H37N3O13=527.5

Specifications	
Appearance	White Crystalline Powder
Identification (FTIR)	Positive
Solubility (100 mg/L)	Clear and colourless solution
Purity (HPLC)	>92%
Potency	>1000 µg/mg
Heavy metals	<20 ppm
Specific rotation	+22.1
Endotoxin	<10 EU/mg

Store at 2 - 8°C

CAS 31282-04-9

GHS05 Corrosive

GHS06 Acute toxicity

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

KANAMYCIN MONOSULPHATE

SKU	Size
KAN0005	5g
KAN0025	25g

C18H36N4O11·H2SO4=582.6

Store dry at room temperature
Soluble in water

CAS 25389-94-0

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

TETRACYCLINE HCL

SKU	Size
TBSL0500-7.4	500ml
TBSL1000-7.4	1 Litre
TBSL5000-7.4	5 Litre

10 X sterile stock solution

Dilute 100ml TBS Buffered Saline 10X into 900ml deionised water to make 1 litre of TBS Saline Buffer 1 X.

Final concentration is 0.1 M Tris Buffer and 0.14 M Sodium chloride, pH 7.4.

Specifications		
TRIS Buffer	1.0 M	121.4 g/L
Sodium Chloride	1.4 M	81.9 g/L

Store at room temperature. Keep away from light

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

H413 Toxic to aquatic life with long lasting effects

BIOCHEMICALS & LIQUID BUFFERS

3-AMINO-1,2,4-TRIAZOLE, 3-AT

SKU	Size
3AT010	10g
3AT025	25g
3AT100	100g

C2H4N4=84.08

3-AT is a competitive inhibitor of the product of the HIS3 gene, imidazoleglycerol-phosphate dehydratase. Imidazoleglycerol-phosphate dehydratase is an enzyme catalyzing the sixth step of histidine production.

Specifications	
Assay (TLC)	≥95%
Melting range	152 - 153°C
Loss on drying	<0.2%

Store at 2 - 8°C. CAS 61-82-5

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

5-AMINOLEVULINIC ACID HYDROCHLORIDE

SKU	Size
5ALA01	1g
5ALA05	5g
5-ALA10	10g

NH2CH2COCH2CH2COOH.HCl = 167.59

Specifications	
Assay (HPLC)	≥99%
Melting range	148.2 - 149.6°C
Loss on drying	<0.2%
Residue on ignition	0.06%

CAS 5451-09-2

5-FLUORO OROTIC ACID MONOHYDRATE

SKU	Size
5FOA01	1g
5FOA05	5g
5FOA10	10g

C5H3FN2O4.H2O = 192.1

Specifications	
Character	Slight yellow crystalline powder
Solubility	Soluble in DMSO, slightly soluble in alcohol and methanol
Assay (HPLC)	≥98%
Loss on drying	<0.2%

CAS 207291-81-4

GHS07 Skin & Eye Irritation

AGAROSE ULTRAPURE

SKU	Size
AGS0025	25g
AGS0100	100g
AGS0250	250g
AGS0500	500g
AGS1000	1kg

Properties	
Appearance	Powder
Colour	White or off-white
Endonuclease/ligase inhibitory factor	Negative
Gel Strength (1.0% Gel)	=>1200 g/cm2
EEO (Electroendosmosis(-Mr)	<= 0.13
Water	<= 10.0%
Sulfate	<= 0.15%
Ash	<= 0.5%
DNase	Negative
RNase	Negative
Protease	Negative
Melting Point °C	88 ± 1.5°C
Gelling Point °C	36 ± 1.5°C
Solubility (1% water)	Clear colourless solution

Agarose is a highly purified linear galactan hydrocolloid isolated from seaweed Gelidium species which forms a firm gel matrix with a high strength at low concentrations making it ideal for diffusion and electrokinetic movement of biopolymers such as DNA and RNA. Our Agarose Ultrapure is recommended for electrophoresis of nucleic acids > 1000 bp. It is manufactured and quality controlled specifically to meet the stringent requirements associated with nucleic acid applications.

CAS 9012-36-6

DTT 1, 4-DITHIOTHREITOL

SKU	Size
DTT005	5g
DTT010	10g
DTT025	25g
DTT100	100g

Dithiothreitol C4H10O2S2=154.2

Store dry at 2-8°C
Soluble in water
Hygroscopic, protect against moisture
CAS 3483-12-3

Hyrgoscopic - do not breathe dust.
GHS08 - GHS09

GHS07 Skin & Eye Irritation

EDTA DISODIUM

SKU	Size
EDTA250	250g
EDTA500	500g
EDTA1000	1000g
EDTA6000	6 x 1kg

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

GHS07 Skin & Eye Irritation

C10H14N2O8Na2.2H2O = 372.2

EDTA Na2.2H2O
Ethylenediaminetetra-acetate Disodium Dihydrate

Specifications	
Purity	>99%

Store dry at room temperature
Soluble in water (20°C. 100g/L)
Hygroscopic, protect against moisture
CAS 6381-92-6

HEPES

SKU	Size
HEPES01	100g
HEPES03	250g
HEPES05	500g
HEPES10	1000g
HEPES60	6kg

C8H18N2O4S=238.3

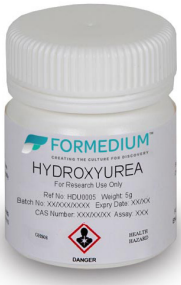
Specifications	
HEPES	>99.5%
Loss on Drying (105 C° 4hr)	<0.5%
Water Content (By KF)	<0.5%
Infrared	Complies
pH 1% in water	4.8-5.6 (25°C)
Solubility 1M in water	Clear and colourless solution
Residue on ignition	<0.1%
A260, 1M in water	<0.045
A280, 1M in water	<0.035
A420, 1M in water	<0.20
Heavy Metals	<5 ppm
pKa at 20°C	7.35-7.69

Store dry at room temperature
Soluble in water

CAS 7365-45-9

HYDROXYUREA

SKU	Size
HDU0005	5g
HDU0025	25g
HDU0100	100g
HDU0250	250g



Hyrgoscopic - do not breathe dust
GHS08 - GHS09

DNA replication inhibitor causing deoxyribonucleotide depletion
CH4N2O2=76.05

Hydroxyurea is an anti-neoplastic which Inactivates ribonucleoside reductase by forming a free radical nitroxide that binds a tyrosyl free radical in the active site of the enzyme. This blocks the synthesis of deoxynucleotides, which inhibits DNA synthesis and induces synchronization or cell death in S-phase.

Specifications	
Appearance	White Crystalline Powder
Content by HPLC	>97.5
Water	>0.5%
Related substances	>0.2%
Residue on ignition	>0.1%
Heavy metals	>10ppm
Residue on ignition	>0.1%

Store at 2 -8°C in dark, dry place

CAS 127-07-1

IPTG DIOXANE FREE

SKU	Size
IPTG005	5g
IPTG010	10g
IPTG025	25g
IPTG100	100g
IPTG250	250g

Isopropyl-β-D-1-Thiogalactopyranside
C9H18O5S=238.3

Specifications	
Purity (HPLC)	99.9%
Purity (TLC)	One Spot
IR	Conform standard
Solubility (5%, H2O)	Clear and colourless solution
pH (5%, H2O)	6.0
Optical rotation (C=1, H2O)	-32.4
Melting point	111.5 - 112.4°C
Water KF	0.1%
Dioxane (GLC)*	<1 ppm
* Not used in manufacturing process	

Store dry at 2-8°C. Soluble in ethanol and water

CAS 367-93-1

MES - SDS RUNNING BUFFER 20X

SKU	Size
MES-SDS0500	500ml
MES-SDS1000	1 Litre
MES-SDS5000	5 Litre

20 X sterile RNAse free stock solution

Dilute 50 ml MES-SDS 20X into 950 ml of deionised water to make 1 litre of MES-SDS Running Buffer.Final concentration of 50mM MES, 50mM TRIS base, 3.47mM SDS and 1mM EDTA.

Specifications				
MES	1	M	195.2	g/L
TRIS	1	M	121.1	g/L
SDS	69.3	mM	20	g/L
EDTA Na2	20.5	mM	7.6	g/L

Store at room temperature
Keep away from light

MES MONOHYDRATE

SKU	Size
MES01	100g
MES02	250g
MES03	500g
MES04	1000g
MES05	6 x 1kg

2-(N-Morpholino) Ethanesulfonic acid C6H13NO4S·H2O=213.2

Specifications	
Appearance	White Crystalline Powder
Assay (Titration)	≥99%
Water Content	8.0-8.9%
pH 1% Di HB2BO	3.5-4.5
Solubility 0.1M water Clear	Colourless Solution
Residue On Ignition	≤0.1%
AB280B, 0.5M water	≤0.020
AB260B, 0.5M water	≤0.025
pKa 25	5.9-6.3
Heavy metals (Pb)	≤5ppm

Store dry at room temperature
Soluble in water

CAS 145224-94-8

MOPS

SKU	Size
MOPS01	100g
MOPS02	250g
MOPS03	500g
MOPS04	1000g
MOPS05	6 x 1kg

4-Morpholino propanesulfonic acid C7H15NO4S=209.3

Specifications	
Appearance	White Crystalline Powder
Assay (Titration, Dry Base)	≥99.0%
Water Content by KF	≤1%
Infrared	Complies
Solubility 1M water	Clear colourless solution
pH 1% Di H2O	3.6 - 4.4 (25°C)
A280, 1M water	≤0.10
A260, 1M water	≤0.15

Store dry at room temperature
Soluble in water

CAS 1132-61-2

MOPS - SDS RUNNING BUFFER 20X

SKU	Size
MES-SDS0500	500ml
MES-SDS1000	1 Litre
MES-SDS5000	5 Litre

20 X sterile RNAse free stock solution

Dilute 50 ml MOPS-SDS 20X into 950 ml of deionised water to make 1 litre of MOPS-SDS Running Buffer. Final concentration is 50mM MOPS, 50mM TRIS base, 3.47mM SDS and 1mM EDTA.

Specifications				
MES	1	M	209.3	g/L
TRIS	1	M	121.1	g/L
SDS	69.3	mM	20	g/L
EDTA Na2	20.5	mM	7.6	g/L

Store at room temperature
Keep away from light

PHOSPHATE BUFFERED SALINE

SKU	Size
PBS10L	10L Pack - 99.3g
PBS20L	20L Pack - 198.6g
PBS100L	100L Pack - 993g

pH 7.4 premix

Reliable, quick and no pH adjustment necessary. A 10L pack (99.3g) in one litre is 10X; at this strength the ph is around 6.8/6.9, do not adjust this pH as on dilution to 1X the pH automatically adjusts to 7.4 which we determine during production.

Store at room temperature

RNASEZERO

SKU	Size
RZ500	500ml

RNaseZero is a ready to use solution.

Completely removes RNase contamination from glass, plastic and stainless steel surfaces

GHS07 Skin & Eye Irritation

SDS MICRO-PELLETS

SKU	Size
MES-SDS0500	500ml
MES-SDS1000	1 Litre
MES-SDS5000	5 Litre

20 X sterile RNAse free stock solution

Dilute 50 ml MOPS-SDS 20X into 950 ml of deionised water to make 1 litre of MOPS-SDS Running Buffer. Final concentration is 50mM MOPS, 50mM TRIS base, 3.47mM SDS and 1mM EDTA.

Specifications				
MES	1	M	209.3	g/L
TRIS	1	M	121.1	g/L
SDS	69.3	mM	20	g/L
EDTA Na2	20.5	mM	7.6	g/L

Store at room temperature. Keep away from light.

GHS05 Corrosive

GHS07 Skin & Eye Irritation

TAE BUFFER 50X

SKU	Size
PBS10L	10L Pack - 99.3g
PBS20L	20L Pack - 198.6g
PBS100L	100L Pack - 993g

pH 7.4 premix

Reliable, quick and no pH adjustment necessary. A 10L pack (99.3g) in one litre is 10X; at this strength the ph is around 6.8/6.9, do not adjust this pH as on dilution to 1X the pH automatically adjusts to 7.4 which we determine during production.

Store at room temperature.

TBE BUFFER 10X

SKU	Size
RZ500	500ml

RNaseZero is a ready to use solution.

Completely removes RNase contamination from glass, plastic and stainless steel surfaces

Hyrgoscopic - do not breathe dust
GHS08 - GHS09

TBS BUFFERED SALINE 10X, PH 7.4

SKU	Size
TBSL0500-7.4	500ml
TBSL1000-7.4	1 Litre
TBSL5000-7.4	5 Litre

10 X sterile stock solution

Dilute 100ml TBS Buffered Saline 10X into 900ml deionised water to make 1 litre of TBS Saline Buffer 1 X.

Final concentration is 0.1 M Tris Buffer and 0.14 M Sodium chloride, pH 7.4.

Specifications		
TRIS Buffer	1.0 M	121.4 g/L
Sodium Chloride	1.4 M	81.9 g/L

Store at room temperature
Keep away from light

GHS07 Skin & Eye Irritation

TBS BUFFERED SALINE 10X, PH 7.6

SKU	Size
TBSL0500-7.6	500ml
TBSL1000-7.6	1 Litre
TBSL5000-7.6	5 Litre

10 X sterile stock solution

Dilute 100ml TBS Buffered Saline 10X into 900ml deionised water to make 1 litre of TBS Saline Buffer 1 X.

Final concentration is 0.1 M Tris Buffer and 0.14 M Sodium chloride, pH 7.6.

Specifications		
TRIS Buffer	1.0 M	121.4 g/L
Sodium Chloride	1.4 M	81.9 g/L

Store at room temperature
Keep away from light

GHS07 Skin & Eye Irritation

TBS BUFFERED SALINE 10X, PH 7.8

SKU	Size
TBSL0500-7.8	500ml
TBSL1000-7.8	1 Litre
TBSL5000-7.8	5 Litre

10 X sterile stock solution

Dilute 100ml TBS Buffered Saline 10X into 900ml deionised water to make 1 litre of TBS Saline Buffer 1 X.

Final concentration is 0.1 M Tris Buffer and 0.14 M Sodium chloride, pH 7.8.

Specifications		
TRIS Buffer	1.0 M	121.4 g/L
Sodium Chloride	1.4 M	81.9 g/L

Store at room temperature
Keep away from light

GHS07 Skin & Eye Irritation

TBS BUFFERED SALINE 10X, PH 8

SKU	Size
TBSL0500-7.8	500ml
TBSL1000-7.8	1 Litre
TBSL5000-7.8	5 Litre

10 X sterile stock solution

Dilute 100ml TBS Buffered Saline 10X into 900ml deionised water to make 1 litre of TBS Saline Buffer 1 X.

Final concentration is 0.1 M Tris Buffer and 0.14 M Sodium chloride, pH 8.

Specifications		
TRIS Buffer	1.0 M	121.4 g/L
Sodium Chloride	1.4 M	81.9 g/L

Store at room temperature
Keep away from light

GHS07 Skin & Eye Irritation

TRIS GLYCINE BUFFER 10X

SKU	Size
TGS0500	500ml
TGS1000	1 Litre
TGS5000	5 Litre

Tris Glycine Transfer Buffer 10X sterile stock solution.

Dilute 100ml Tris Glycine Transfer Buffer 10X with 900 ml deionised water to make 1 litre of Tris Glycine Buffer.
Final concentration is 25 mM Tris Base, 0.192 M Glycine and 1g/l SDS.

pH, 20 C. 8.33 ± 0.05 at 1 x use rate.

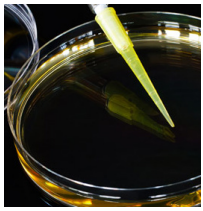
Final concentration after diluting		
TRIS	0.25M30.3	g/L
Glycine	1.92M144.1	g/L
SDS	10.0	g/L

Store at room temperature. Keep away from light

GHS07 Skin & Eye Irritation

MEDIA COMPONENTS

Formedium™ manufactures a large range of media for yeast, fungi and bacterial cell cultures. Part of these media are nutritional elements like Agar, Casamino acids, Glucose, Peptone, Tryptone and Yeast extract.



These nutrients are also offered by Formedium™ as separate media components to allow the researcher to select the optimal concentration of each component for a specific strain.

All products offered by Formedium™ are of high quality and purity and used to produce an extended range of cell culture media.

AGAR

SKU	Size
AGA01	250g
AGA02	500g
AGA03	1000g
AGA04	6 x 1kg

Agar is natural product derived from seaweed. During the production process all impurities are carefully removed to obtain an agar with a high gel strength, excellent clarity and low mineral content. The result is an agar well suited for cell cultures.

Store dry at room temperature.

AGAR GRANULATED, BACTERIOLOGICAL GRADE

SKU	Size
AGR02	250g
AGR05	500g
AGR10	1000g
AGR60	6 x 1kg

Agar Granulated, Bacteriological grade is a fine granulated agar with excellent characteristics for bacteriological growth.

Due to the fine granule structure of this agar dusting while handling is very low.

Store dry at room temperature.

CASAMINO ACIDS

SKU	Size
CAS01	250g
CAS02	500g
CAS03	1000g
CAS04	6 x 1kg

Casamino Acids are manufactured by a controlled acid hydrolysis of casein . Hydrolysis is not completed until all the nitrogen in the casein is converted to amino acids or other compounds of relative chemical simplicity. As a result of the acid hydrolysis process all vitamins and growth factors present in casein are destroyed.

Due to the low sodium chloride concentration ForMedium™Casamino Acids are well suited for cultivation of yeast cells.

Store dry at room temperature.

GHS07 Skin & Eye Irritation

D(+) - GALACTOSE

SKU	Size
ARA001	100g
ARA005	500g
ARA010	1kg

$C_6H_{12}O_6 = 180.16$

Purity HPLC >99%
Water < 0.3%
White Crystalline powder
Store dry at room temperature.

D(+) - GLUCOSE ANHYDROUS

SKU	Size
GLU01	250g
GLU02	500g
GLU03	1000g
GLU04	6 x 1kg

$C_6H_{12}O_6 = 180$

A fine white crystalline quality with excellent properties for cell culture.
Store dry at room temperature.

D(+) - RAFFINOSE PENTAHYDRATE

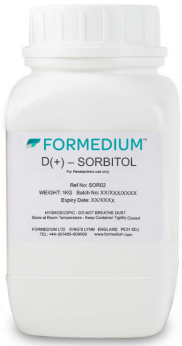
SKU	Size
RAF01	100g
RAF02	250g
RAF03	500g
RAF04	1kg

$C_{18}H_{32}O_{16}.5H_2O = 594.5$

Purity HPLC >99%
White powder
Store dry at room temperature.

D(+) - SORBITOL

SKU	Size
SOR02	1kg
SOR03	5kg



C6H14O6 = 182.17
Complies to Ph. Eur.
White crystalline powder.
Store dry at room temperature.

D(+) - SUCROSE

SKU	Size
SUC01	1kg
SUC06	6 x 1kg

C6H14O6 = 182.17
Complies to Ph. Eur.
White crystalline powder.
Store dry at room temperature.

L- ARABINOSE

SKU	Size
ARA001	100g
ARA005	500g
ARA010	1kg

C5H10O5 = 150.13
Purity HPLC 99%
Purity TLC Single spot
Water < 0.3%
White Crystalline powder
Store dry at room temperature.

LEE'S MEDIUM

SKU	Size
LEES0500	500g
LEES1000	1kg

Suspend 17.09g in 1L of Distilled or De-ionised Water

Formulation		
(NH4)2SO4	5.0	g/L
MgSO4.7H2O	0.2	g/L
K2HPO	2.5	g/L
NaCl	5.0	g/L
L-Alanine	0.5	g/L
L-Leucine	1.3	g/L
L-Lysine	1.0	g/L
L-Methionine	0.1	g/L
L-Ornithine	0.0714	g/L
L-Phenylalanine	0.5	g/L
L-Proline	0.5	g/L
L-Threonine	0.5	g/L
Biotin	0.001	g/L

Store at Room Temperature.
Keep Container Tightly Closed.

LEE'S MULTI-DIFFERENTIAL AGAR (LMDA) MEDIUM

SKU	Size
LMDA01	1kg
LMDA05	5kg
LMDA10	10kg
LMDA25	25kg

Suspend 17.09g in 1L of Distilled or De-ionised Water

Formulation		
(NH4)2SO4	5.0	g/L
MgSO4.7H2O	0.2	g/L
K2HPO	2.5	g/L
NaCl	5.0	g/L
L-Alanine	0.5	g/L
L-Leucine	1.3	g/L
L-Lysine	1.0	g/L
L-Methionine	0.1	g/L
L-Ornithine	0.0714	g/L
L-Phenylalanine	0.5	g/L
L-Proline	0.5	g/L
L-Threonine	0.5	g/L
Biotin	0.001	g/L

Store at Room Temperature.
Keep Container Tightly Closed.

MALT EXTRACT

SKU	Size
MAL03	1kg

Malt extract is prepared from Malt by extracting the soluble products from sprouted grain.

The product contains a mix of carbohydrates (mainly maltose) and growth factors.

Solubility in water at 3 % Complete
pH (3 % solution) 4.8 - 5.8
Loss on drying ≤ 6.0 %
Reducing sugars (as maltose) ≥ 60.0 %
Residue on ignition ≤ 4.5 %
Chloride (as NaCl) ≤ 1.0 %

Store dry at room temperature.

PEPTONE

SKU	Size
PEP01	250g
PEP02	500g
PEP03	1000g
PEP04	6 x 1kg

Peptone is a spray dried powder, manufactured by a controlled enzymatic hydrolysis of animal tissue. The most commonly used enzymes are pepsin, papain and pancreatin. The latter containing trypsin.

Pepsin will cut the peptide chain anywhere there is a phenylalanine or leucine bond.

Papain cuts in the peptide chain adjacent to arginine, lysine, phenylalanine and glycine. Pancreatin has its action at arginine, lysine, tyrosine, tryptophan, phenylalanine and leucine bonds.

The tissues are hydrolysed to produce straw coloured peptones which are highly nutritious and clearly soluble in water. Peptones contain a mix of peptides, free amino acids and growth factors.

Due to the low sodium chloride concentration ForMedium™Pepton is well suited for cultivation of yeast cells.

Store dry at room temperature.

POTATO EXTRACT

SKU	Size
PTE01	250g
PTE02	500g
PTE03	1000g
PTE04	6 x 1kg

Potato extract is a mixture of potato proteins, manufactured by controlled enzymatic hydrolysis. The extract is an excellent nitrogen source for bacteria, yeasts and fungi. Potato extract is rich in vitamins and minerals and supports a vigorous growth of micro-organisms.

Store dry at room temperature.

SODIUM CHLORIDE

SKU	Size
NAC02	1000g
NAC03	6 x 1kg

NaCl = 58.4

Complies to Ph. Eur and USP
Heavy metals < 5 ppm
Ferrocyanides

A fine white crystalline quality with excellent properties for cell culture.

Store dry at room temperature.

SOYA PEPTONE

SKU	Size
VPEP01	250g
VPEP02	500g
VPEP03	1000g
VPEP04	6 x 1kg

Soya Peptone is a papaic digest of defatted soybean flour and is a well-balanced source of essential amino acids, carbohydrates and vitamins in cell cultures.

Soya Peptone is used for growth of a wide variety of bacteria and yeasts in cell cultures and is often combined with Tryptone or Peptone for a rapid and abundant growth of cells.

This plant peptone is classified animal-free by Formedium Ltd. Based on the manufacturing protocol, we attest that no animal raw materials are prescribed for use in the production of this product, nor are any of the raw materials derived from animal products.

Soya Peptone is classified animal free, GMO free (according to the European Directive 2001/18/CE).

Store dry at room temperature

TRYPTONE

SKU	Size
TRP01	250g
TRP02	500g
TRP03	1000g
TRP04	6 x 1kg

Enzymatic digest of casein

Tryptone is a pancreatic digest of casein. Casein is the main protein of milk and is a rich source of amino acid nitrogen. Amongst all amino acids especially Tryptophan is present in high concentrations.

Due to the rich nutritional properties, Tryptone is added to media as an accelerator to increase the yield of organisms and is recommended where a rapid and luxuriant growth of micro organisms is required.

Store dry at room temperature.

YEAST EXTRACT, POWDER

SKU	Size
YEA01	250g
YEA02	500g
YEA03	1000g
YEA04	6 x 1kg

Yeast Extract is a spray dried extract manufactured by complete autolysis, i.e. a transformation of proteins into peptides, and amino acids, implemented through the proteolytic enzymes present in yeast cells.

The cell membranes are discarded, enabling completely soluble yeast extracts to be obtained. Besides peptides and amino acids yeast extract also contains purine and pyrimidine bases, carbohydrates and water soluble vitamins of B group.

Sodium Chloride concentration of Formedium™Yeast Extract is low and also therefore well suited for cultivation of yeast cells.

Due to its carbohydrate content, typically 10%, yeast extract is not suitable for media intended for the study of sugar fermentation.

Store dry at room temperature.

SACCHAROMYCES CEREVISIAE YEAST NITROGEN BASE TECHNICAL DATA

	Yeast Morphology Agar	Yeast Nitrogen Base	Yeast Potassium Nitrate Nitrogen Base	Yeast Nitrogen Base w/o Amino Acids	Yeast Nitrogen w/o Amino Acids and w/o Ammonium Sulfate	Yeast Carbon Base	Vitamin Free Yeast Base
Nitrogen Source g/l							
Ammonium Sulphate	3.5	5	-	5	-	-	5
Asparagine	1.5	-	-	-	-	-	-
Potassium Nitrate	-	-	0.78	-	-	-	-
Caseine Hydrolysate	-	-	-	-	-	-	-
Carbon Source g/l							
Glucose.H2O	10	-	-	-	-	10	10
Galactose	-	-	-	-	-	-	-
Raffinose	-	-	-	-	-	-	-
Amino Acids mg/l							
Histidine.HCl	10	10	1	-	-	1	10
Methionine	20	20	2	-	-	2	20
Tryptophan	20	20	2	-	-	2	20
Vitamins µg/l							
Biotin	2	2	2	2	2	2	-
Ca-Panthotenate	400	400	400	400	400	400	-
Folic Acid	2	2	2	2	2	2	-
Inositol	2000	2000	2000	2000	2000	2000	-
Nicotinic Acid	400	400	400	400	400	400	-
p-Aminobenzoic Acid	200	200	200	200	200	200	-

	Yeast Morphology Agar	Yeast Nitrogen Base	Yeast Potassium Nitrate Nitrogen Base	Yeast Nitrogen Base w/o Amino Acids	Yeast Nitrogen w/o Amino Acids and w/o Ammonium Sulfate	Yeast Carbon Base	Vitamin Free Yeast Base
Pyridoxine HCl	400	400	400	400	400	400	-
Riboflavin	200	200	200	200	200	200	-
Thiamine HCl	400	400	400	400	400	400	-
Trace Elements µg/l							
Boric Acid	500	500	500	500	500	500	500
Copper Sulfate	40	40	40	40	40	40	40
Potsssium Iodide	100	100	100	100	100	100	100
Ferric Chloride	200	200	200	200	200	200	200
Manganese Sulfate	400	400	400	400	400	400	400
Sodium Molybdate	200	200	200	200	200	200	200
Zinc Sulfate	400	400	400	400	400	400	400
Minerals g/l							
KH2PO4	1	1	1	1	1	1	1
Magnesium Sulphate.anh	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Sodium Chloride	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Calcium Chloride.anh	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Agar g/l							
Agar	18	-	-	-	-	-	-

SACCHAROMYCES CEREVISIAE SYNTHETIC COMPLETE MEDIA TECHNICAL DATA

	SC Agar / Glucose	SC Broth / Glucose	SC Agar / Galactose	SC Broth / Galactose	SC Agar / Raffinose	SC Broth / Raffinose	SC Agar / Succinate	SC Broth / Succinate	SC Agar / Galactose and Raffinose	SC Broth / Galactose and Raffinose	SC-amino acids supplement
Nitrogen Source g/l											
Ammonium Sulphate	5	5	5	5	5	5	5	5	5	5	-
Carbon Source g/l											
Glucose.H2O	20	20	-	-	-	-	-	-	-	-	-
Galactose	-	-	20	20	-	-	-	-	20	20	-
Raffinose	-	-	-	-	20	20	-	-	10	10	-
Succinate	-	-	-	-	-	-	33	33	-	-	-
Vitamins µg/l											
Biotin	2	2	2	2	2	2	2	2	2	2	-
Ca-Panthotenate	400	400	400	400	400	400	400	400	400	400	-
Folic Acid	2	2	2	2	2	2	2	2	2	2	-
Inositol	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	-
Nicotinic Acid	400	400	400	400	400	400	400	400	400	400	-
p-Aminobenzoic Acid	200	200	200	200	200	200	200	200	200	200	-
Pyridoxine HCl	400	400	400	400	400	400	400	400	400	400	-
Riboflavin	200	200	200	200	200	200	200	200	200	200	-
Thiamine HCl	400	400	400	400	400	400	400	400	400	400	-
Trace Elements µg/l											
Boric Acid	500	500	500	500	500	500	500	500	500	500	-
Copper Sulfate	40	40	40	40	40	40	40	40	40	40	-
Potsssium Iodide	100	100	100	100	100	100	100	100	100	100	-
Ferric Chloride	200	200	200	200	200	200	200	200	200	200	-
Manganese Sulfate	400	400	400	400	400	400	400	400	400	400	-
Sodium Molybdate	200	200	200	200	200	200	200	200	200	200	-
Zinc Sulfate	400	400	400	400	400	400	400	400	400	400	-
Minerals g/l											
KH2PO4	1	1	1	1	1	1	1	1	1	1	-
Magnesium Sulphate.anh	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-

	SC Agar / Glucose	SC Broth / Glucose	SC Agar / Galactose	SC Broth / Galactose	SC Agar / Raffinose	SC Broth / Raffinose	SC Agar / Succinate	SC Broth / Succinate	SC Agar / Galactose and Raffinose	SC Broth / Galactose and Raffinose	SC-amino acids supplement
Sodium Chloride	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-
Calcium Chloride.anh	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-
Agar g/l											
Agar	18	-	18	-	18	-	18	-	18	-	-
Supplements mg/l											
Adenine Sulphate	18	18	18	18	18	18	18	18	18	18	18
Alanine	76	76	76	76	76	76	76	76	76	76	76
Arginine	76	76	76	76	76	76	76	76	76	76	76
Asparagine	76	76	76	76	76	76	76	76	76	76	76
Aspartic Acid	76	76	76	76	76	76	76	76	76	76	76
Cysteine	76	76	76	76	76	76	76	76	76	76	76
Glutamine	76	76	76	76	76	76	76	76	76	76	76
Glutamic Acid	76	76	76	76	76	76	76	76	76	76	76
Glycine	76	76	76	76	76	76	76	76	76	76	76
Histidine	76	76	76	76	76	76	76	76	76	76	76
Inositol	76	76	76	76	76	76	76	76	76	76	76
Isoleucine	76	76	76	76	76	76	76	76	76	76	76
Leucine	360	360	360	360	360	360	360	360	360	360	360
Lysine	76	76	76	76	76	76	76	76	76	76	76
Methionine	76	76	76	76	76	76	76	76	76	76	76
PABA	8	8	8	8	8	8	8	8	8	8	8
Phenylalanine	76	76	76	76	76	76	76	76	76	76	76
Proline	76	76	76	76	76	76	76	76	76	76	76
Serine	76	76	76	76	76	76	76	76	76	76	76
Threonine	76	76	76	76	76	76	76	76	76	76	76
Tryptophan	76	76	76	76	76	76	76	76	76	76	76
Tyrosine	76	76	76	76	76	76	76	76	76	76	76
Uracil	76	76	76	76	76	76	76	76	76	76	76
Valine	76	76	76	76	76	76	76	76	76	76	76

SACCHAROMYCES CEREVISIAE SYNTHETIC MINIMAL MEDIA TECHNICAL DATA

	SD Agar / Glucose	SD Broth / Glucose	SD Agar / Glucose w/o Phosphate	SD Broth / Glucose w/o Phosphate	SD Agar / Galactose	SD Broth / Galactose	SD Agar / Raffinose	SD Broth / Raffinose	SD Agar / Succinate	SD Broth / Succinate	SD Agar / Galactose and Raffinose	SD Broth / Galactose and Raffinose
Nitrogen Source g/l												
Ammonium Sulphate	5	5	5	5	5	5	5	5	5	5	5	5
Carbon Source g/l												
Glucose.H2O	20	20	20	20	-	-	-	-	-	-	-	-
Galactose	-	-	-	-	20	20	-	-	-	-	20	20
Raffinose	-	-	-	-	-	-	20	20	-	-	10	10
Succinate	-	-	-	-	-	-	-	-	33	33	-	-
Vitamins µg/l												
Biotin	2	2	2	2	2	2	2	2	2	2	2	2
Ca-Panthotenate	400	400	400	400	400	400	400	400	400	400	400	400
Folic Acid	2	2	2	2	2	2	2	2	2	2	2	2
Inositol	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
Nicotinic Acid	400	400	400	400	400	400	400	400	400	400	400	400
p-Aminobenzoic Acid	200	200	200	200	200	200	200	200	200	200	200	200
Pyridoxine HCl	400	400	400	400	400	400	400	400	400	400	400	400
Riboflavin	200	200	200	200	200	200	200	200	200	200	200	200
Thiamine HCl	400	400	400	400	400	400	400	400	400	400	400	400
Trace Elements µg/l												
Boric Acid	500	500	500	500	500	500	500	500	500	500	500	500
Copper Sulfate	40	40	40	40	40	40	40	40	40	40	40	40
Potsssium Iodide	100	100	100	100	100	100	100	100	100	100	100	100

	SD Agar / Glucose	SD Broth / Glucose	SD Agar / Glucose w/o Phosphate	SD Broth / Glucose w/o Phosphate	SD Agar / Galactose	SD Broth / Galactose	SD Agar / Raffinose	SD Broth / Raffinose	SD Agar / Succinate	SD Broth / Succinate	SD Agar / Galactose and Raffinose	SD Broth / Galactose and Raffinose
Ferric Chloride	200	200	200	200	200	200	200	200	200	200	200	200
Manganese Sulfate	400	400	400	400	400	400	400	400	400	400	400	400
Sodium Molybdate	200	200	200	200	200	200	200	200	200	200	200	200
Zinc Sulfate	400	400	400	400	400	400	400	400	400	400	400	400
Minerals g/l												
KH2PO4	1	1	-	-	1	1	1	1	1	1	1	1
Magnesium Sulphate.anh	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Sodium Chloride	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Calcium Chloride.anh	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Agar g/l												
Agar	18	-	18	-	18	-	18	-	18	-	18	-

SACCHAROMYCES CEREVISIAE YEAST NITROGEN BASE WITHOUT AMINO ACIDS TECHNICAL DATA

	Yeast Morphology Agar	Yeast Nitrogen Base	Yeast Potassium Nitrate Nitrogen Base	Yeast Nitrogen Base w/o Amino Acids	Yeast Nitrogen w/o Amino Acids and w/o Ammonium Sulfate	Yeast Carbon Base	Vitamin Free Yeast Base
Nitrogen Source g/l							
Ammonium Sulphate	3.5	5	-	5	-	-	5
Asparagine	1.5	-	-	-	-	-	-
Potassium Nitrate	-	-	0.78	-	-	-	-
Caseine Hydrolysate	-	-	-	-	-	-	-
Carbon Source g/l							
Glucose.H2O	10	-	-	-	-	10	10
Galactose	-	-	-	-	-	-	-
Raffinose	-	-	-	-	-	-	-
Amino Acids mg/l							
Histidine.HCl	10	10	1	-	-	1	10
Methionine	20	20	2	-	-	2	20
Tryptophan	20	20	2	-	-	2	20
Vitamins µg/l							
Biotin	2	2	2	2	2	2	-
Ca-Panthotenate	400	400	400	400	400	400	-
Folic Acid	2	2	2	2	2	2	-
Inositol	2000	2000	2000	2000	2000	2000	-
Nicotinic Acid	400	400	400	400	400	400	-
p-Aminobenzoic Acid	200	200	200	200	200	200	-

	Yeast Morphology Agar	Yeast Nitrogen Base	Yeast Potassium Nitrate Nitrogen Base	Yeast Nitrogen Base w/o Amino Acids	Yeast Nitrogen w/o Amino Acids and w/o Ammonium Sulfate	Yeast Carbon Base	Vitamin Free Yeast Base
Pyridoxine HCl	400	400	400	400	400	400	-
Riboflavin	200	200	200	200	200	200	-
Thiamine HCl	400	400	400	400	400	400	-
Trace Elements µg/l							
Boric Acid	500	500	500	500	500	500	500
Copper Sulfate	40	40	40	40	40	40	40
Potsssium Iodide	100	100	100	100	100	100	100
Ferric Chloride	200	200	200	200	200	200	200
Manganese Sulfate	400	400	400	400	400	400	400
Sodium Molybdate	200	200	200	200	200	200	200
Zinc Sulfate	400	400	400	400	400	400	400
Minerals g/l							
KH2PO4	1	1	1	1	1	1	1
Magnesium Sulphate.anh	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Sodium Chloride	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Calcium Chloride.anh	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Agar g/l							
Agar	18	-	-	-	-	-	-

SACCHAROMYCES CEREVISIAE YEAST NITROGEN BASE WITHOUT AMINO ACIDS AND WITHOUT AMMONIUM SULPHATE TECHNICAL DATA

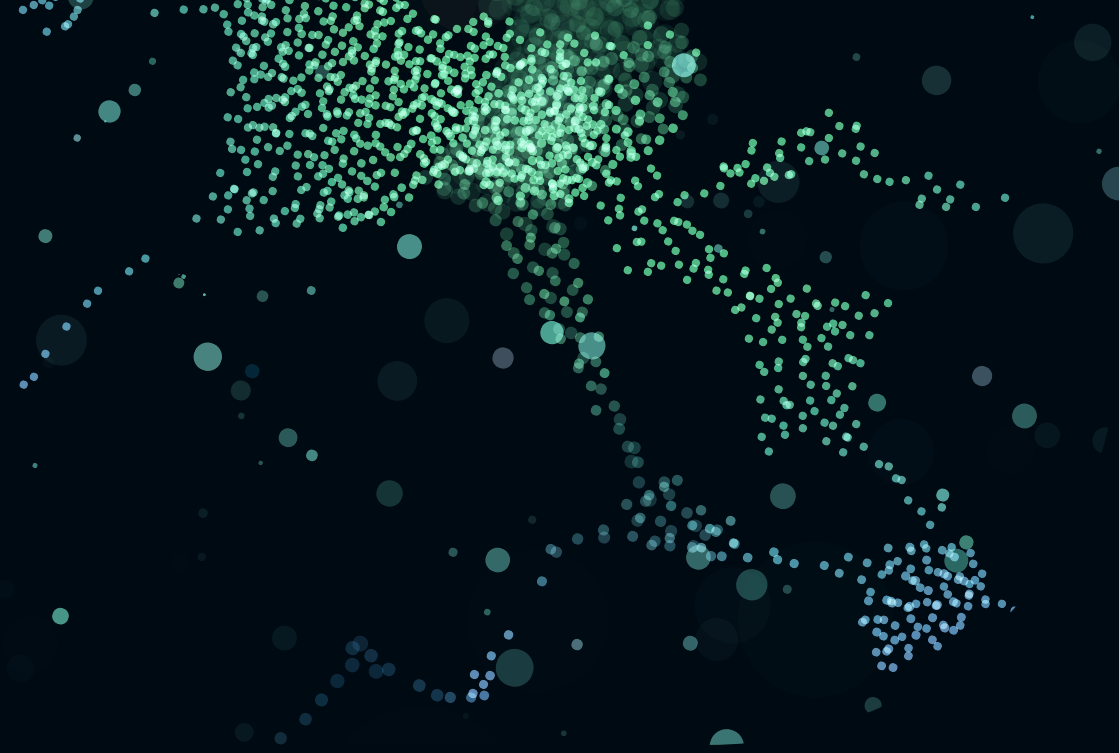
	Yeast Morphology Agar	Yeast Nitrogen Base	Yeast Potassium Nitrate Nitrogen Base	Yeast Nitrogen Base w/o Amino Acids	Yeast Nitrogen w/o Amino Acids and w/o Ammonium Sulfate	Yeast Carbon Base	Vitamin Free Yeast Base
Nitrogen Source g/l							
Ammonium Sulphate	3.5	5	-	5	-	-	5
Asparagine	1.5	-	-	-	-	-	-
Potassium Nitrate	-	-	0.78	-	-	-	-
Caseine Hydrolysate	-	-	-	-	-	-	-
Carbon Source g/l							
Glucose.H2O	10	-	-	-	-	10	10
Galactose	-	-	-	-	-	-	-
Raffinose	-	-	-	-	-	-	-
Amino Acids mg/l							
Histidine.HCl	10	10	1	-	-	1	10
Methionine	20	20	2	-	-	2	20
Tryptophan	20	20	2	-	-	2	20
Vitamins µg/l							
Biotin	2	2	2	2	2	2	-
Ca-Panthotenate	400	400	400	400	400	400	-
Folic Acid	2	2	2	2	2	2	-
Inositol	2000	2000	2000	2000	2000	2000	-

	Yeast Morphology Agar	Yeast Nitrogen Base	Yeast Potassium Nitrate Nitrogen Base	Yeast Nitrogen Base w/o Amino Acids	Yeast Nitrogen w/o Amino Acids and w/o Ammonium Sulfate	Yeast Carbon Base	Vitamin Free Yeast Base
Nicotinic Acid	400	400	400	400	400	400	-
p-Aminobenzoic Acid	200	200	200	200	200	200	-
Pyridoxine HCl	400	400	400	400	400	400	-
Riboflavin	200	200	200	200	200	200	-
Thiamine HCl	400	400	400	400	400	400	-
Trace Elements µg/l							
Boric Acid	500	500	500	500	500	500	500
Copper Sulfate	40	40	40	40	40	40	40
Potsssium Iodide	100	100	100	100	100	100	100
Ferric Chloride	200	200	200	200	200	200	200
Manganese Sulfate	400	400	400	400	400	400	400
Sodium Molybdate	200	200	200	200	200	200	200
Zinc Sulfate	400	400	400	400	400	400	400
Minerals g/l							
KH2PO4	1	1	1	1	1	1	1
Magnesium Sulphate.anh	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Sodium Chloride	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Calcium Chloride.anh	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Agar g/l							
Agar	18	-	-	-	-	-	-

SCHIZOSACCHAROMYCES POMBE MINIMAL DEFINED MEDIA TECHNICAL DATA

	EMM	EMM w/o Dextrose	EMM-Low Glucose	EMMS (1.2 M Sorbitol)	EMM w/o Phosphate	EMM w/o Nitrogen	EMM SP	MB Medium	MMA Agar Medium	Units
Carbon Source										
Dextrose	20.00	-	5.00	20.00	20.00	20.00	20.00	-	-	g
Glucose	-	-	-	-	-	-	-	5.00	10.00	g
Sorbitol	-	-	-	216.00	-	-	-	-	-	g
Amino Acids										
Adenine	-	-	-	-	-	-	50.00	-	-	mg
Histidine	-	-	-	-	-	-	50.00	-	-	mg
Lysine	-	-	-	-	-	-	50.00	-	-	mg
L-Leucine	-	-	-	-	-	-	-	150.00	-	mg
Uracil	-	-	-	-	-	-	-	150.00	-	mg
Minerals										
Phtalic Acid K+	3.00	3.00	3.00	3.00	3.00	3.00	3.00	-	-	g
Na2HPO4	2.20	2.20	2.20	2.20	-	2.20	2.20	-	-	g
NH4Cl	5.00	5.00	5.00	5.00	5.00	-	5.00	-	-	g
MgCl2.6H2O	1.05	1.05	1.05	1.05	1.05	1.05	1.05	-	-	g
CaCl2.2H2O	14.70	14.70	14.70	14.70	14.70	14.70	14.70	100.00	100.00	mg
KCl	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-	-	g
Na2SO4	40.00	40.00	40.00	40.00	40.00	40.00	40.00	-	-	mg
KH2PO4	-	-	-	-	-	-	-	500.00	1000.00	mg
K+ Acetate	-	-	-	-	-	-	-	360.00	-	mg
MgSO4.7H20	-	-	-	-	-	-	-	500.00	500.00	mg
NaCl	-	-	-	-	-	-	-	100.00	100.00	mg
(NH4)2SO4	-	-	-	-	-	-	-	5000.00	5000.00	mg

	EMM	EMM w/o Dextrose	EMM-Low Glucose	EMMS (1.2 M Sorbitol)	EMM w/o Phosphate	EMM w/o Nitrogen	EMM SP	MB Medium	MMA Agar Medium	Units
Vitamins										
Panthotenic acid	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-	-	mg
Nicotinic acid	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	mg
Inositol	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	mg
Biotin	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.01	0.01	mg
Ca-Pantothenate	-	-	-	-	-	-	-	1.00	1.00	mg
Trace Elements										
H3BO3	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	mg
MnSO4.H2O	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	mg
ZnSO4.7H2O	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	mg
FeCl3.6H2O	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	mg
Na2MoO4.2H2O	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	mg
KI	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	mg
CuSO4.5H2O	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	mg
Citric Acid	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-	-	mg
Agar										
Agar	(17)	(17)	(17)	-	(17)	(17)	(17)	-	17.00	g
Total										
Total	32.30	12.30	17.30	248.30	30.10	27.30	32.50	11.90	-	g/l
Total (Agar)	(49.30)	(23.30)	(34.30)	-	(47.10)	(44.30)	(49.50)	-	-	g/l



FORMEDIUM™

CREATING THE CULTURE FOR DISCOVERY

WE'RE HERE TO HELP

Visit our website to get a
FREE quote & to shop online

WWW.FORMEDIUM.COM

King's Lynn, Norfolk
PE31 6DJ
+44 (0) 1485 609069

info@formedium.com
sales@formedium.com
Facebook.com/formedium
Linkedin.com/company/formedium