



M9 and M9CA Medium Broth, Powders

Code	Description	Size
J863-500G	M9 Medium Broth, Powder	500 grams
J863-100G	M9 Medium Broth, Powder	100 grams
J864-100G	M9CA Medium Broth, Powder	100 grams

General Information

M9 Medium Broth, Powder is a minimal medium, based on the M9 Minimal Salts, which supports the growth of *Escherichia coli*. This medium is useful in maintaining positive selection pressure on plasmids coding for substances, such as amino acids or vitamins. It can also be used to maintain bacteria for use with M13. M9 Broth can be supplemented with specific amino acids or other metabolites that allows for specific selection pressures that the researcher may require. M9CA Medium Broth, Powder also supports the growth of recombinant strains of *Escherichia coli*. This media is supplemented with casamino acids, which provides the bacteria with a rich source of nitrogen that they can use during growth. The M9 and M9CA Medium Broth Powders contain ammonium chloride, which provides a source of nitrogen, and potassium and sodium phosphates, which buffer the media against changes in pH due to metabolism. The inclusion of sodium chloride helps maintain isotonicity within the medium during growth. Supplements such as glucose, magnesium, and calcium are used to enhance the growth of the bacteria. Glucose is added as an additional carbon source, and magnesium and calcium are added to increase the growth of recombinants.

Storage/Stability

Store M9 and M9CA Medium Broth, Powders at room temperature (18 to 26°C). Store prepared media cold (2 to 8°C).

Product Use Limitations

For research use only. Not for therapeutic or diagnostic use.

M9 Medium Broth, Powder

Formulation	grams/L
Sodium Phosphate, Dibasic	6
Potassium Phosphate, Monobasic	3
Sodium Chloride	0.5
Ammonium Chloride	1

M9CA Medium Broth, Powder

Formulation	grams/L
Sodium Phosphate, Dibasic	6
Potassium Phosphate, Monobasic	3
Sodium Chloride	0.5
Ammonium Chloride	1
Casamino Acids	2

Additional Required Materials Not Supplied

Sodium hydroxide
 1 M magnesium sulfate, sterile
 20% glucose, sterile
 1 M calcium chloride, sterile

Protocol/Procedure

M9 Medium Broth preparation

1. Suspend 10.5 g of M9 Medium Broth, Powder in 1 L of distilled, deionized water.
2. Allow the powder to dissolve with gentle stirring and heating, if necessary.
3. Adjust the pH to 7.4 with sodium hydroxide.
4. Autoclave for 15 minutes at 15 psi at 121°C. **Note:** *Alternatively, medium may be sterile-filtered.*
5. Allow the solution to cool to 50°C or below before adding supplemental components and antibiotic.
6. Add 2 mL of sterile 1 M magnesium sulfate, 10 mL of sterile 20% glucose and 0.1 mL of sterile 1 M calcium chloride.

M9CA Medium Broth preparation

1. Suspend 12.5 g of M9CA Medium Broth, Powder in 1 L of distilled, deionized water.
2. Allow the powder to dissolve with gentle stirring and heating, if necessary.

3. Adjust the pH to 7.4 with sodium hydroxide.
4. Autoclave for 15 minutes at 15 psi at 121°C. **Note:** *Alternatively, medium may be sterile-filtered.*
5. Allow the solution to cool to 50°C or below before adding supplemental components and antibiotic.
6. Add 2 mL of sterile 1 M magnesium sulfate, 10 mL of sterile 20% glucose and 0.1 mL of sterile 1 M calcium chloride.

For Technical Support

Toll Free: 1-800-610-2789 (USA & Canada)

Fax: (440) 349-0235

Email: techinquiry@amresco-inc.com

AMRESKO, LLC

A VWR Company

Corporate Headquarters
28600 Fountain Parkway
Solon, Ohio USA 44139-4300

Tel: 440/349-1199

Fax: 440/349-1182

www.amresco-inc.com

M9 and M9CA Medium Broth, Powders

ZY0587

Rev. 2 12/2015

© Copyright 2010 by AMRESKO, LLC

All Rights Reserved.

AMRESKO® is a registered trademark of AMRESKO, LLC