Nutritional Supplements

Supplement	Stock Conc.	Final Conc.	Amt./l
Adenine Sulfate	2.5 mg/ml	50 µg/ml	20 ml
p-aminobenzoate	1.0 mg/ml	1 µg/ml	1 ml
D-biotin	20 µg/ml	0.02 µg/ml	1 ml
Choline HCl	20 mg/ml	20 µg/ml	1 ml
Leucine	2 mg/ml	50 µg/ml	25 ml
L-isoleucine	2 mg/ml	50 µg/ml	25 ml
L-lysine HCl	20 mg/ml	200 µg/ml	10 ml
L-methionine	5 mg/ml	50 µg/ml	10 ml
Nicotinic acid	2 mg/ml	20 µg/ml	1 ml
L-phenylalanine	10 mg/ml	50 µg/ml	5 ml
Pyrodoxine HCl	0.5 mg/ml	0.5 µg/ml	1 ml
Riboflavin HCL	2.5 mg/ml	2.5 µg/ml	1 ml
Ornithine	20 mg/ml	200 µg/ml	10 ml
Arginine	10 mg/ml	100 µg/ml	10 ml
Proline	25 mg/ml	250 µg/ml	10 ml
Tyrosine	0.1 mg/ml	0.1 µg/ml	1 ml
Tryptophan	0.1 mg/ml	0.1 µg/ml	1 ml

Supplements should be made up in water and sterilized by autoclaving. They should then be stored in the refrigerator.

Sulfate nonutilization markers can be tested for by adding either methionine or adding 4 ml/liter of a solution of 1 gram anhydrous sodium thiosulfate to 5 ml of sterile water. This solution should be made fresh before adding to molten agar medium.

Nitrate nonutilization markers can be tested for by adding either ammonium tartrate to 50 mM. Ammonium sulfate or chloride can also be used but they have the disadvantage that the pH of the medium will change as they are metabolized.