

Certificate of Analysis

Product: SC Amino Acid Mixture
Catalog No.: 4400-022; 4400-0X2
Lot No.: 69574

Drop-Out		Supplementsmg/L
Adenine		21
L-Alanine		86.5
L-Arginine	HCl	85.6
L-Asparagine		85.6
L-Aspartic	Acid	85.6
L-Cysteine HCl		85.6
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

Recommended **Use:**
Add 2 g of SC to each liter of DOB (or DOBA) and autoclave at 121°C
for 15 minutes for complete synthetic defined medium for *S.cerevisiae*.

Storage:
Store SC powder at ambient temperature (15-30°C). SC powder is hygroscopic, therefore minimize exposure to air to prolong storage of powder mixture. Store sterile medium at 4°C.

Shelf Life: Storage life in closed container: 4 years from the date the powder was made.

Quality Assurance Information

All MP Biomedicals products are thoroughly tested to ensure reliable results in the laboratory.

Media

Preparation:

Reagents are tested and chosen for their ability to promote optimum growth of yeast strains when combined in the Drop Out Base (DOB) or Drop Out Base with 17 g Agar (DOBA) formula, with SC. DOB contains 1.7g Yeast Nitrogen Base, 5g Ammonium Sulfate, and 20g Dextrose per liter. Chosen reagents are combined in the proper proportions according to the formulation listed on the Certificate of Analysis and milled to thoroughly blend the reagents for a uniform distribution. A sample of the milled and blended formulation was used to prepare liquid or plate medium by adding 2.7g DOB (or 4.37g DOBA) powder and 0.2 g of SC to a 100ml of purified water. The combinations were mixed by hand for about 1 minute to dissolve the dextrose and autoclaved at 121°C for 15 minutes. After cooling to 50°C, plates of DOBA powder with SC were poured.

DOB (or DOBA) with SC liquid solution was visually inspected after autoclaving for complete dissolution of components. The pH of the medium was tested to insure that the proper specification was attained. Acceptable pH range is 4.0 - 4.8 for DOB with SC, report result for DOBA with SC. DOB (or DOBA) with SC was tested by *S.cerevisiae* cell growth at 30°C for approximately 48 hours.

Results	of	Quality	Control	Assay:
DOB (or DOBA) with SC liquid solution was determined to be			clear	and particulate free.
pH of solution of DOB with SC was found to be			4.19	@ 24.3°C,
pH of solution of DOBA with SC was found to be			4.51	@ 36.5°C,
The cell growth of DOB (or DOBA) with SC			passed	the test.

Conclusions:

This lot of SC Amino Acid Mixture is released for product sales.

05/28/2015 - John Huang, PhD
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Senior QC Chemist

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