

Certificate of Analysis

Product: CSM-Met
Catalog No.: 4510-712; 4510-722
Lot No.: 23147

FORMULATION:

Drop-Out	Supplementsmg/L
Adenine	10
L-Arginine	HCl 50
L-Aspartic	Acid80
L-Histidine	HCl20
L-Isoleucine	50
L-Leucine	100
L-Lysine HCl	50
L-Methionine	0
L-Phenylalanine	50
L-Threonine	100
L-Tryptophan	50
L-Tyrosine	50
Uracil	20
L-Valine	140
Total	770

Recommended

Add 0.77g of CSM-Met to each liter of DOB or DOBA and autoclave at 121°C for 25 minutes for complete synthetic defined single drop-out medium for *S.cerevisiae*.

Use:

Storage:

Store CSM-Met powder at ambient temperature (15-30°C). CSM powder is hygroscopic, therefore minimize exposure to air to prolong storage of powder mixture. Store sterile agar medium at 4°C. And liquid medium at 15-30°C in subdued light.

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 DOB or DOBA with CSM-Met formula. DOB (Drop Out Base) is 1.7g Yeast Nitrogen Base, 5g Ammonium Sulfate, 20g Dextrose per liter. DOBA is DOB with 17% agar. Chosen reagents are combined in the proper proportions according to the formulation listed in the certificate of analysis and milled to a powder which thoroughly blends the reagents for uniform distribution. A sample of the milled and blended formulation was used to prepare liquid plate medium by adding 43.7g DOBA powder and 0.77g of CSM-Met to a liter of purified water. The combinations were mixed by hand for about 1 minute to dissolve the dextrose and autoclaved at 121°C for 25 minutes. After cooling to 50°C plates were poured.

Quality

Control

Assay:

DOBA with CSM-Met 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 5-5.8. The CSM-Met was tested by spotting 16 strains of yeast that have distinct auxotrophic phenotypes onto the plates and incubating at 30°C. On days 2, 3 and 4 plates were examined for the pattern of growth. All strains grew on DOBA with CSM plates, i.e., with complete supplement mixture with no "drop-outs".

NUMBER AND PHENOTYPE OF CONTROL STRAINS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
ADE	-	-	-	+	-	+	+	-	+	-	+	+	+	-	+	+
ARG	+	+	-	+	+	+	+	+	+	+	+	-	+	+	-	+
ASP	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
HIS	+	-	+	+	+	+	+	-	+	+	+	+	+	+	+	+
LEU	+	+	+	+	+	+	+	-	+	-	+	+	-	-	-	+
LYS	+	+	-	+	+	+	+	-	+	-	-	+	+	-	-	+
MET	+	+	-	-	+	-	+	+	+	+	+	+	+	+	-	+
THR	+	+	+	-	+	+	+	+	+	+	+	+	+	+	-	+
TRP	+	+	-	+	+	+	+	-	-	-	+	+	+	-	+	+
TYR	-	+	+	+	+	+	+	+	+	+	+	+	+	-	-	+
URA	+	+	-	+	+	+	-	+	+	-	+	+	+	-	-	+

Results	of	Quality	Control	Assay:						
CSM-Met	liquid	solution	was	determined	to	be	clear	and	particulate	free.
pH	of	solution	was	found	to	be	5.5			
Growth	Studies:	All	strains	grew	except:	3,	4,	6,	15.	

Conclusions: This lot of CSM-Met is released for product sales.

Christina Marotta

05/30/2012 - Christina Marotta
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MSDS available online at www.mpbio.com