



Product Information Sheet

S7668 Sueoka's High-Salt Medium

Synonym: HS or HSM

Properties:

Form: Fine to Coarse Powder
Appearance: White to Off-White
Application: Freshwater algal culture
Solubility: Water
Typical Working Concentration: 2.78 g/L
Storage Temp: 2-6°C
Storage Temp of Stock Solution: Preparation of concentrated solutions is not recommended as insoluble precipitates may form.

Formula (mg/L):

Ammonium Chloride	500.0	Ferrous Sulfate•7H ₂ O	4.990
Ammonium Molybdate•4H ₂ O	1.100	Magnesium Sulfate, Anhydrous	9.77
Boric Acid	11.40	Manganese Chloride•4H ₂ O	5.060
Calcium Chloride, Anhydrous	7.548	Potassium Phosphate, Dibasic	1440.0
Cobalt Chloride•6H ₂ O	1.610	Potassium Phosphate, Monobasic	720.0
Cupric Sulfate•5H ₂ O	1.570	Zinc Sulfate•7H ₂ O	22.00
Sodium EDTA•2H ₂ O	50.00		

Application Notes:

Sueoka's High-Salt medium is a general maintenance medium often used for *Chlamydomonas reinhardtii*, the most well-characterized eukaryotic algae, and is an alternative to Tris-Acetate-Phosphate (TAP) medium, (Prod. No. T8224).

Media Preparation:

If S7668 is to be used photoheterotrophically, 2 g of sodium acetate trihydrate or 1.2 g of the anhydrous form are added per liter of medium to obtain the proper final concentration of acetate (14.7 mM) (Harris 1989). This solution is then adjusted to pH 6.8 with HCl.

PhytoTechnology Laboratories® also carries Sueoka's High-Salt-Acetate medium (Prod. No. S7766) (Gilham *et al.*, 1970).

References:

- Gilham, N. W., J. E. Boynton, and B. Burholder. (1970). Mutations altering chloroplast ribosome phenotype in *Chlamydomonas*, I, non-mendelian mutations. *Proc. Natl. Acad. Sci. USA* 67, 1026-1033.
- Harris, E.H. (1989): The *Chlamydomonas* sourcebook: a comprehensive guide to biology and laboratory use. Academic Press, San Diego, 780pp.
- Nichols, G.L. and P. J. Syrett. (1978). Nitrate reductase deficient mutants of *Chlamydomonas reinhardtii* isolation and genetics. *Journal of General Microbiology*. 108. 71-77.
- Sueoka, N. (1960) *Proc. Natl. Acad. Sci. USA* 46, 83-91

PhytoTechnology Laboratories®

P.O. Box 12205; Shawnee Mission, KS 66282-2205

Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442

Web Site: www.phytotechlab.com

© 2012 PhytoTechnology Laboratories®