



Product Information Sheet

S7766 Sueoka's High-Salt-Acetate Medium

Synonym: HSA

Properties:

Form: Fine to Coarse Powder
Appearance: White to Off-White
Application: Freshwater algal culture
Solubility: Water
Typical Working Concentration: 3.98 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	Sodium Acetate, Anhydrous	1205.6

Application Notes:

Sueoka's High-Salt-Acetate medium is a modification of Sueoka's High-Salt medium by Gilham *et al.* in 1970. It is a general maintenance medium often used for *Chlamydomonas reinhardtii*, the most well-characterized eukaryotic algae. S7766 contains 1.20 g/L of sodium acetate anhydrous to obtain the proper final concentration of acetate (14.7 mM) as suggested by Gilham *et al.* in 1970 (Harris 1989). It is an alternative to Tris-Acetate-Phosphate (TAP) medium (Prod. No. T8224).

Media Preparation:

S7766 final solution pH is adjusted to 6.8 with HCl.

PhytoTechnology Laboratories® also carries Sueoka's High-Salt medium (Prod. No. S7668) (Sueoka 1960) without acetate for photoautotrophic growth.

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

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