

## T8050 TAP(Tris-Acetate-Phosphate) Solution (1X)

Synonym: TAP

**Properties:** 

Form: Liquid

Application: Clear and Colorless
Application: Freshwater algal culture
Solubility: Miscible with Water

Storage Temp: 2 - 8°C

Biological Assay: Algal culture tested with Chlamydomonas reinhardtii

Formula (mg/L):

1 01111414 (111g/ = /)			
Ammonium Chloride	400.0	Ferrous Sulfate•7H2O	4.990
Tris-Base	2420	Magnesium Sulfate•7H2O	100
Ammonium Molybdate•4H2O	1.100	Manganese Chloride•4H2O	5.060
Boric Acid	11.40	Potassium Phosphate, Dibasic	108.0
Calcium Chloride•2H2O	50.0	Potassium Phosphate, Monobasic	54.00
Cobalt Chloride•6H2O	1.610	Zinc Sulfate•7H2O	22.00
Cupric Sulfate•5H2O	1.570	Glacial Acetic Acid	1 mL
EDTA, Disodium Salt	50.00		

## **Application Notes:**

Tris-acetate-phosphate medium (TAP) is a standard maintenance medium often used *for Chlamydomonas reinhardtii*, the most well-characterized eukaryotic freshwater algae. Ammonium (NH<sub>4</sub>+) serves as the primary nitrogen source and Tris buffers the pH. Since TAP contains a relatively low concentration of phosphate, it can be used for <sup>32</sup>P labeling as well as experiments/isolations that require clarity of solid-substrate cultures (e.g. agar) (Harris 1989).

T8050 is a complete medium containing 17.4 mM of acetate with pH adjusted to 7.0 +/- 0.1.

PhytoTech Labs Inc. also carries TAP powder, Product No. T8224.

## References:

Gorman, D.S., and R.P. Levine (1965) Proc. Natl. Acad. Sci. USA 54, 1665-1669. Harris, E.H. (1989): The *Chlamydomonas* sourcebook: a comprehensive guide to biology and laboratory use. Academic Press, San Diego, 780pp.

## PhytoTech Labs Inc.