

Product Information Sheet

B1675 Bold's Basal Medium

Synonym: BBM

Properties:

Form: Powder
Appearance: Off-White to Gray/Green
Application: Freshwater algal culture
Solubility: Soluble in Water
Typical Working Concentration: 0.705 g/L
Storage Temp: 2-6°C
Storage Temp of Stock Solution: 2-6°C

Other Notes: In order to conform with the original reference, 1.0 mL of 0.1% Sulfuric Acid Solution should be added per liter of this medium when prepared at a 1x concentration.
Product or solutions may develop a purple tint over time.

Formula (mg/L):

Boric Acid	11.42	Manganese Chloride•4H ₂ O	1.44
Calcium Chloride, Anhydrous	18.87	Potassium Hydroxide	31.0
Cobalt Nitrate•6H ₂ O	0.49	Potassium Phosphate, Dibasic	75.0
Cupric Sulfate•5H ₂ O	1.57	Potassium Phosphate, Monobasic	175.0
EDTA, Disodium Salt	63.61	Sodium Chloride	25.0
Ferrous Sulfate•7H ₂ O	4.98	Sodium Molybdate	1.19
Magnesium Sulfate, Anhydrous	36.63	Sodium Nitrate	250.0
		Zinc Sulfate•7H ₂ O	8.82

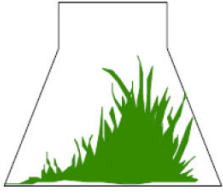
Application Notes:

Bold's Basal Medium (BBM) is a freshwater algae medium that has been used to grow a variety of green algal cultures (e.g. *Trichosarcina*, *Chlorococcum*, and *Chlorella*) without the need for soil-extract or vitamins (Brown *et al.*, 1964; Nichols and Bold, 1965). The predominantly inorganic nature of this medium facilitates itself as an axenic-culture maintenance medium (Nichols and Bold, 1965).

Other algae species commonly grown in Bold's Basal Medium:
Zyngonium ericetorum (Stancheva *et al.*, 2014)

Media Preparation:

The standard medium is prepared as follows: Add 1.0 mL of 0.1% Sulfuric Acid solution to 1 liter of DI water along with 0.705 g of B1675. The final solution pH is adjusted to 6.6 +/- 0.1 with KOH (Stein, 1973).



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References:

Brown, R.M., Larson, D.A., and H.C. Bold. (1964) *Science* 143(3606), 583-585.

Nichols H.W., and H.C. Bold (1965) *J. Phycology* 1, 34-38.

Stancheva, R., Hall, J. D., Herburger, K., Lewis, L. A., McCourt, R. M., Sheath, R. G., & Holzinger, A. (2014).

Phylogenetic position of *Zygonium ericetorum* (Zygnematophyceae, Charophyta) from a high alpine habitat and ultrastructural characterization of unusual aplanospores. *Journal of Phycology*, 50(5), 790-803.

Stein J. (1973) Handbook of Phycological methods. Culture Methods and Growth Measurements. Cambridge University Press. 448 pp.