

Bold's Basal Medium (BBM)

Product ID: **B1675**

Introduction

Description: 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).

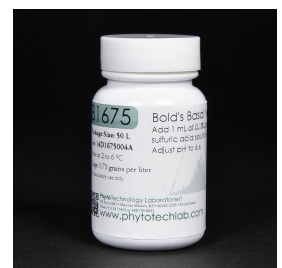
Requires 1 mL/L Sulfuric Acid, 0.1% (v/v) (Product # S7664).

Product Information

Solubility	Water
Use With	S7664
Physical Form	Solid
Solutions Available	B1411 (50x)
Storage Temp.	2-6 °C
Grams of powder to prepare 1 Liter	0.705
Other Notes	Add 1.0 mL of 0.1% Sulfuric Acid (S7664) to complete this medium.
UPC / SKU	B1675

Product Information

MSDS



B1675 Bold's Basal Medium

Synonyms: 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
Cobalt Nitrate.6H ₂ O	0.49
Potassium Phosphate, Dibasic	75
Cupric Sulfate.5H ₂ O	1.57
Potassium Phosphate, Monobasic	175
EDTA, Disodium Salt	63.61
Sodium Chloride	25
Ferrous Sulfate.7H ₂ O	4.98
Sodium Molybdate	1.19
Magnesium Sulfate, Anhydrous	36.63
Sodium Nitrate	250
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:
Zyngogonium 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).

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 *Zyngogonium 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.

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