

Product Information

Product name: **Bold Modified Freshwater Nutrient Solution**

Other names: Modified Bold Basal Medium

Product code: GMNB-BMFN01

Properties:

	Mixture A	Stock B
Form	Powder	Liquid
Vol.	For 300L (225g)	For 25L (50X stock, 500ml)
Colour	White	Clear
Solubility	Water	-
Store at	RT	RT
	Prepared media solution: 2~6°C	
Shelf life	3 years	3 years
	Prepared media solution: 1 year	
Application	Modified Bold Basal Medium is an axenic-culture maintenance medium in phycology/algae studies. Commonly used for the cultivation of a variety of freshwater algae cultures (e.g. Trichosarcina, Chlorococcum, and Chlorella) without the need for soil-extract or vitamins (Brown et al., 1964; Nichols and Bold, 1965). Other algae species like Zygnemataceae (Zygogonium ericetorum) can also be grown in Bold's Basal Medium (Stancheva et al., 2014)	

Components: mg per litre

Mixture A - Basal Salts	
Macro Elements	
Sodium nitrate	250
Potassium phosphate monobasic	175
Potassium phosphate dibasic	75
Magnesium sulphate • 7H ₂ O	75
Calcium chloride dihydrate	25
Sodium chloride	25
Potassium hydroxide	31
EDTA, Disodium Salt	63.61
Micro Elements	
Boric acid	11.42
Zinc sulphate • 7H ₂ O	8.82
Ferrous sulphate • 7H ₂ O	4.98
Cobalt nitrate • 6H ₂ O	0.49
Cupric sulphate • 5H ₂ O	1.57
Manganese chloride • 4H ₂ O	1.44
Sodium Molybdate	1.19

Stock B - Trace Elements

Nickel chloride • 6H ₂ O	0.003
Potassium iodide	0.003
Sodium selenite	0.002
Stannic chloride	0.001
Vanadium sulphate • 3H ₂ O	0.0022

Preparation:

Dissolve 0.75g of Mixture A in 980ml of ion-free water or MQ water, add 20 mL of Stock B to make the media solution 1 litre. Add 1.0 mL of 0.1% Sulfuric Acid solution to 1 litre of Bold Basal Media liquid.

The final solution pH should be adjusted to 6.6 +/- 0.1 with 5M KOH.