

Cell-Hi Liquid Nutrient

MAKING ALGAE EASY



Varicon Aqua has more than 20 years' experience providing high quality engineering and consumable products into the algal biotechnology sector. This experience has led to the development of solutions appropriate for both **laboratory and industrial** settings.

Our Cell-Hi All-in-One nutrient range provides a simple and **highly economic** approach to algal nutrition at scale.

Each of the Cell-Hi All-in-One product lines is based on tried and tested industry standard formulations and available premixed as a **100% soluble** powder or as a concentrated liquid.

This unique All-in-One approach allows us to incorporate all the nutritional requirements in one single use product.

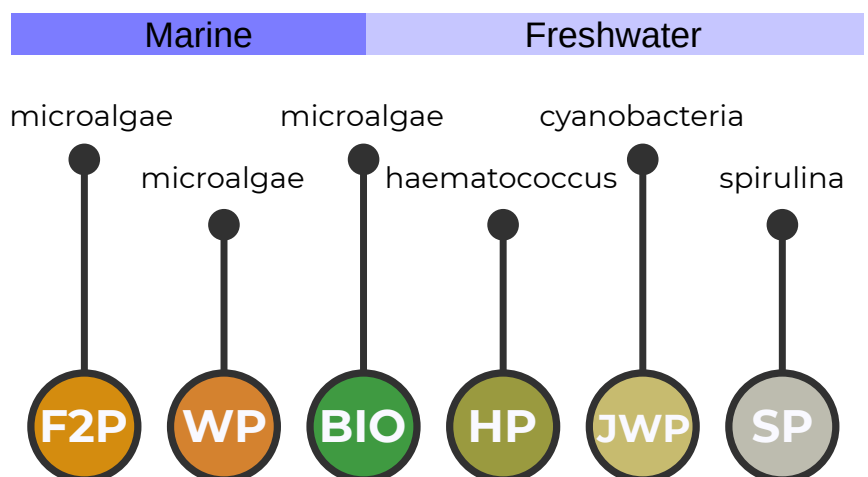
Cell-Hi BIO is a high nitrogen N-P-K **liquid fertilizer** made exclusively from plant-based material, which does not contain urea.

BIO is derived from a product approved for use in controlled input organic farms by the Soil Association.

Cell-Hi BIO is a by-product of food production which contains a broad range of beneficial micronutrients. Suitable for use for most microalgae.

Need nutrients for your algae culture – The Cell-Hi range has a solution for almost any marine and freshwater microalgae.

Cell-Hi Nutrient Range



Nutrient Composition.

Macro-nutrients (element)	Average Inclusion by Molar Mass
Total available Nitrogen (N)	7.15 %
Phosphorous (P)	0.55 %
Potassium (K)	1.00 %
NPK Ratio	7 : 1 : 1
Micro-nutrients (element)	Average Inclusion by Molar Mass
Iron (Fe)	38 mg/kg
Zinc (Zn)	38 mg/kg
Copper (Cu)	10 mg/kg
Manganese (Mn)	19 mg/kg
Boron (B)	18 mg/kg
Calcium (Ca)	0.2 % (w/w)
Magnesium (Mg)	0.2 % (w/w)
Sodium (Na)	1.2 % (w/w)
Sulphur (S)	1.7 % (w/w)
Amino Acid Content	17 % (w/w)
Total Solids	59 % (w/w)

Cell-Hi Liquid

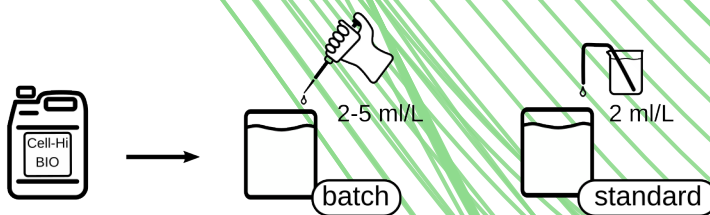


Plant-based Nutrients for

Most
microalgae

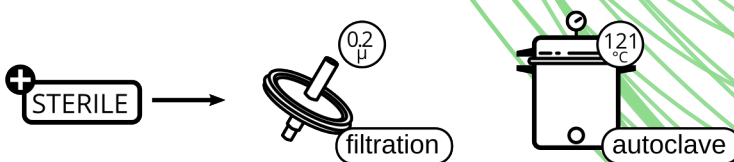
Directions for use.

cultivation



In batch cultivation, recommended use is at concentrations between 2-5 ml/L. For standard cultivation, BIO is typically included at a rate of 2 ml/L.

biosecurity



Diluted media can be sterilised if passed through a 0.2 micron syringe. Autoclaving is possible, however this can alter the chemical composition slightly.

storage



For increased productivity during diatom production add 30 mg/l of metasilicate to the growth media.

For increased productivity during spirulina production add 16.7 g/l of sodium bicarbonate to the growth media.