

Cell-Hi All-in-One 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.

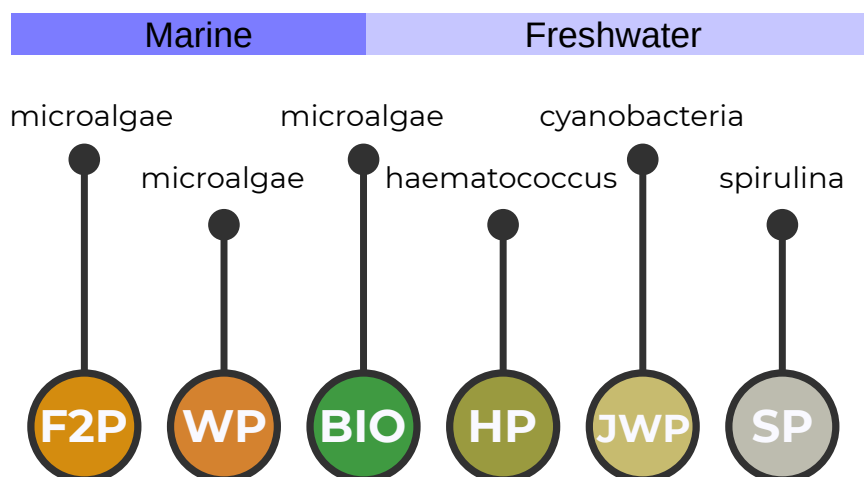
This unique All-in-One approach allows us to incorporate all the nutritional requirements in one single use product.

Cell-Hi SP is a Zarrouk's freshwater specific 100% soluble premix powder which has been used extensively in microalgal aquaculture.

Cell-Hi SP contains all the essential macro-nutrients, micronutrients for freshwater microalgal growth. It is the only fully soluble premix product based on Zarrouk's formula available on the market. Cell-Hi SP is a highly concentrated nutrient premix. Zarrouk's medium is optimised for use with Spirulina.

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)	8.00 %
Phosphorous (P)	1.70 %
Potassium (K)	12.37 %
NPK Ratio	8 : 2 : 12
Micro-nutrients (element)	Average Inclusion by Molar Mass
Iron (Fe)	0.064 %
Zinc (Zn)	0.00 %
Copper (Cu)	0.0018 %
Cobalt (Co)	0.00 %
Manganese (Mn)	0.014 %
Molybdenum (Mo)	0.0001 %
Boron (B)	0.0077 %
Calcium (Ca)	0.41 %
Magnesium (Mg)	0.39 %
Sulphur (S)	4.14 %

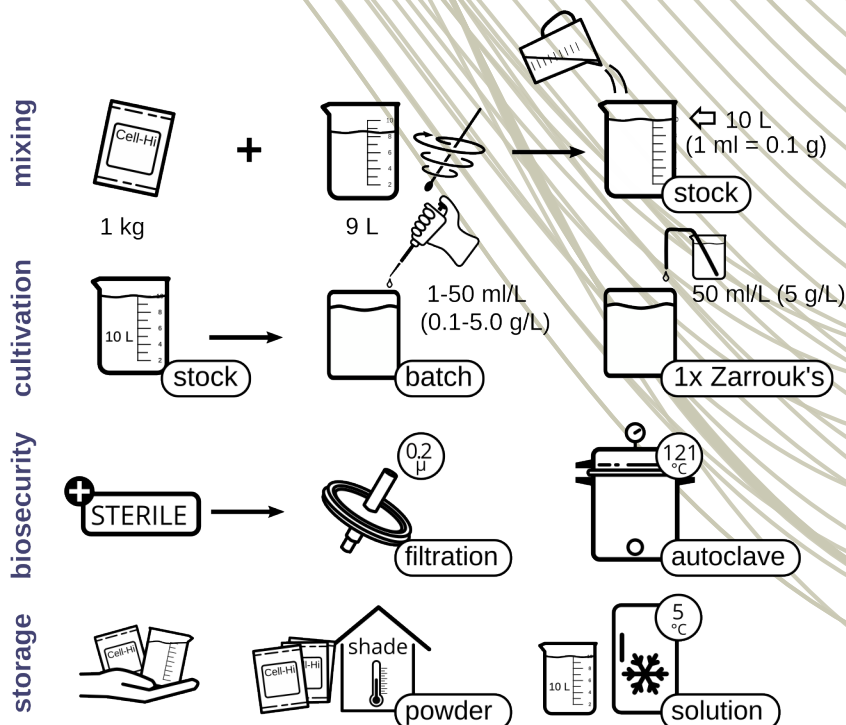
Cell-Hi All-in-One



Soluble Nutrients for

Spirulina

Directions for use.



Prepare a stock solution at 1 Kg/10 L.

In batch cultivation, recommended use is at concentrations between 0.1-5.0 g/L. For a 1x Zarrouk's concentration, SP should be included at a rate of 50 ml/L (5.0 g/L).

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

Keep the product out of direct sun and in shade. Keep solutions refrigerated.

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