

Aminogro MAXi



 L-Form amino acid
chelates Carboxylate Mannitol Complex

Aminogro MAXi with OrganoPLEX Technology

Aminogro MAXi is a range of high analysis liquid and soluble powder organic nitrogen containing both free L-form amino acids and peptides from a non-animal protein source. The range includes straight Nitrogen N7% liquid and N13% soluble powder and single element micronutrient powders. The micronutrient powders contain OrganoPLEX Technology which is L-form amino acids complexed with low molecular weight organic acids and carbohydrates. OrganoPLEXed nutrients are shuttled directly into the plant metabolic process when applied either to the roots or the foliage to provide immediate nutrient stress relief resulting in improved plant growth, development and yields.

Aminogro MAXi and Environmental Benefits

High analysis nitrogen like Urea and Nitrate based fertilisers are very efficient at delivering nitrogen to the plant because of their high solubility coefficients and reactivity. However, because of this they tend to be more readily leached and volatilised as (NO_2^+) making them both potential ground water contaminants and greenhouse gas emitters. Nitrogen supplied by Aminogro MAXi in the form of L-form amino acids, polyamines and peptides are not as reactive and have low solubility coefficients. The Aminogro MAXi range also contain a high source of organic carbon which when applied to soils provides microbes with the carbon they need to liberate nitrogen without using the carbon reserve in the soil. This minimises the "burning up" of precious soil carbon which happens when high analysis salt based Nitrogen or Urea based nitrogen is applied. Aminogro MAXi range can be used in environmentally sensitive areas where ground water contamination or run-of can be very detrimental to a sensitive ecosystem and where audited carbon neutral farming practices are being implemented.

Aminogro MAXi and L-form Amino acids

Plants assimilate nitrogen as amine (NH_2^+) which is moved around plants attached to amino acids like Glutamic and Aspartic acid. Amino acids are also the building blocks of plant proteins and regulators of essential plant functions like photosynthesis, respiration and ultimately crop yields. Plants survive and thrive on the way amino acids are created, transformed and mobilized in plants.

The L-form amino acids found in Aminogro MAXi are known to regulate plant responses that help them adapt to the prevailing environmental conditions. The table over the page, lists the amino acids in Aminogro MAXi and their use by plants to regulate specific plant functions.

Organoplex L-Form amino acid chelates Carboxylate Mannitol Complex

Amino acid	mg/g	Mole%	Function in Plants
Arginine	54.1	4.4%	Salt stress tolerance, Root development enhancement
Aspartic Acid	41.6	4.4%	Seed germination stimulant
Glutamic Acid	80.0	7.6%	Chlorophyll production, Seed germination
Alanine	72.0	11.4%	Chlorophyll production
Serine	16.0	2.1%	Chlorophyll production, Stomata regulation for plant water use, Pollination
Glycine	190.3	35.6%	Chelate action for better uptake of other nutrients
Histidine	4.1	0.4%	Stomata regulation for better drought stress
Threonine	7.6	0.9%	Drought stress tolerance
Proline	105.3	12.9%	Salt stress, Drought stress tolerance, Pollen germination
Tyrosine	3.2	0.2%	Drought stress tolerance, Pollination, Pollen germination
Valine	19.7	2.4%	Drought stress tolerance, Seed germination, Pollination
Methionine	6.4	0.6%	Ripening, Stomata opening regulation for better plant water use
Isoleucine	11.8	1.3%	Salt stress tolerance, Pollen germination, Pollination
Leucine	23.2	2.5%	Salt stress tolerance, Pollen germination
Phenylalaline	15.1	1.3%	Humic compound, Pollination, Lignine production for stronger cell walls
Lysine	25.7	2.5%	Stomata regulation, Chlorophyll synthesis, Pollen germination
Hydroxyproline	90.1	9.5%	Plant germination and embryonic development

Aminogro MAXi Micronutrients and Bio-GUARDIAN Biologicals

Hidden nutritional hungers from lack of micro-nutrients can have serious yield limiting implications. Micro-nutrients help plants' regulate against crop limiting stress responses to changes in growing condition. The ability of plants to cope with and recover from stress is the key to more uniform, high yielding crops. The Aminogro MAXi range of micronutrients provides all the essential nutrients needed by plants for optimum growth and development and yields under stressed conditions. We have the capacity to provide **prescription blends** based on your plant requirements with the addition of **Bio-GUARDIAN** Biologicals. **Bio-GUARDIAN** are a blend of beneficial bacteria and fungi that assists with plant growth and are natural enemies of plant pathogens. Ask your local OCP Agronomist for advice as to a blend that best suits your needs.



	Nitrogen	Organic Carbon
Aminogro MAXi Powder	13%	45%
Aminogro MAXi Liquid	7%	33%

Aminogro MAXi OrganoPLEX	Nitrogen	Organic Carbon
Zinc 12%	5.4%	15%
Boron 8%	6.4%	14.0%
Iron 12%	7.6%	19%
Calcium 12%	7.6%	19%
Manganese 10%	7.5%	21%
Copper 12%	6.0%	18%
Magnesium 8%	7.1%	19%
COMBI Fe 5% Mn2% Zn 4% Cu 1% B 0.6% Mo 0.07%	7.4%	16%