

nitroP9

— 9-0-0 —
Soluble Nitrogen Fertilizer



nitroP9

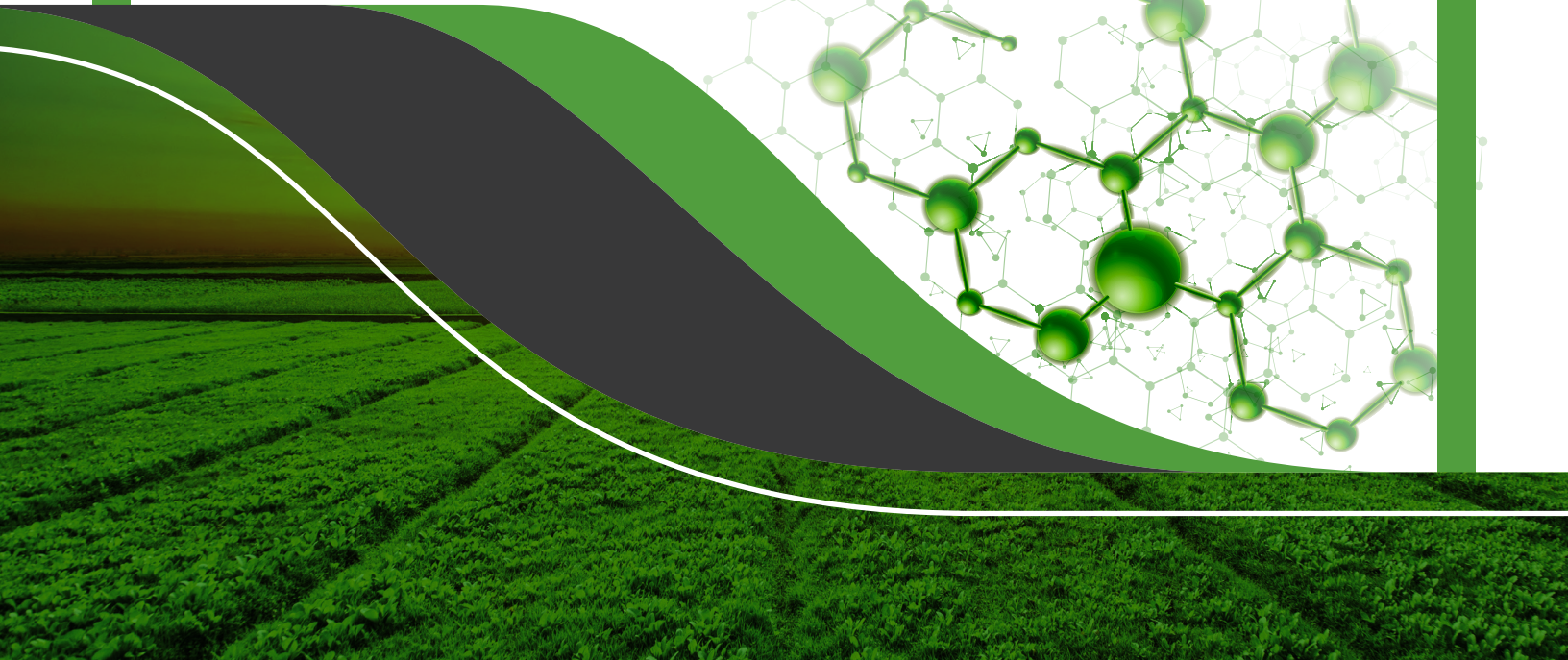
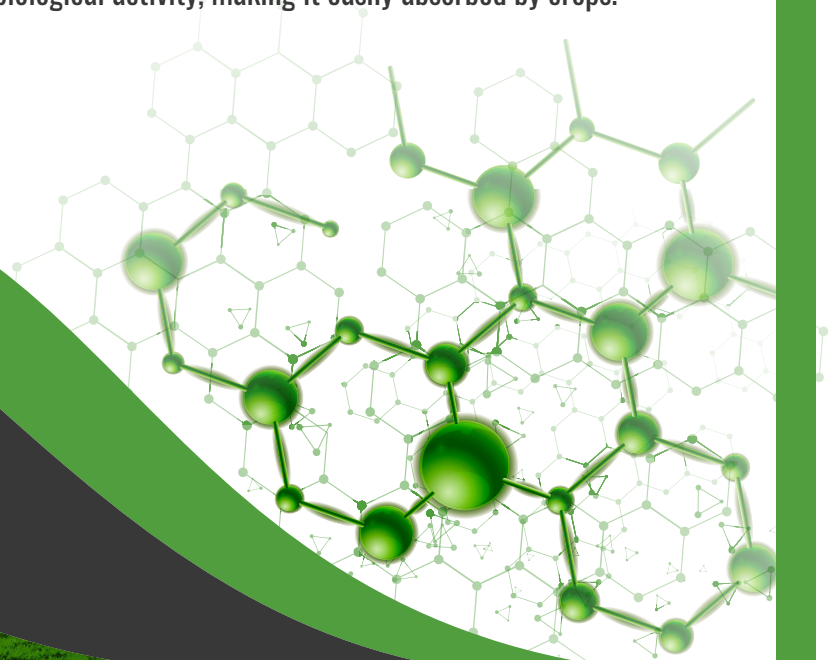
is an organic nitrogen source derived from plant-based L-Amino Acids that feed the plant and soil and enhance a plant's natural defense against biotic and abiotic stressors. Because of its high concentration of amino acids, proteins, enzymes, vitamins, sugars, and other proprietary compounds, this innovative formula provides many benefits.

Amino acid fertilizers are readily absorbed, transported, and utilized as a source of nitrogen and carbon for plants. This, in turn, reduces the energy used by the plant to convert organic matter, synthetic nitrates, and ammonia into amino acids

Many amino acids also function as biostimulants for plants. As a biostimulant, amino acids can enhance plant productivity, especially under abiotic and biotic stress conditions. These benefits make sustainably produced amino acids an intelligent choice for growers who need an alternative nitrogen source.

Amino Acids are nature's building blocks and contribute to many plant functions: cell wall strength, fruit quality, pollination, pollen fertility, hormone synthesis, formation of vegetative tissue, chlorophyll synthesis, stomatal regulation, and nutrient chelation are some of the many processes that depend on these amino acids.

The ingredients in this formula are produced using an enzymatic hydrolysis process, which gives Nitro P9 outstanding water-solubility and high biological activity, making it easily absorbed by crops.



7 key reasons for using Nitro P9

- 1 AMINO ACIDS HELP PHOTOSYNTHESIS.**

Amino acids will help in the production of chlorophyll, which leads to improved photosynthesis.
- 2 AMINO ACIDS HELP INCREASE NUTRIENT ABSORPTION.**

Plant leaves contain thousands of stomata, tiny pores that help plants absorb CO₂ and nutrients. Amino Acids help plants better regulate the use of these stomata, especially in very wet or very dry situations. Amino acids are also known to complex (chelate) minerals. An amino acid-complexed mineral is a mineral (like magnesium or iron) that's been molecularly attached to an amino acid.
- 3 AMINO ACIDS REDUCE STRESS-RELATED PROBLEMS.**

When exposed to severe environmental stresses, such as high or low temperatures, amino acids help the plant fight stress, recover faster, and maintain denser growth.
- 4 AMINO ACIDS SUPPORT PLANT HORMONES.**

Hormones are crucial in the development of almost all plant growth stages. Many amino acids are the building blocks of these phytohormones, which control the development of healthy tissues and cells. Regular use of amino acids promotes the natural production of phytohormones without using separate supplements.
- 5 AMINO ACIDS HELP IMPROVE MICROBIAL ACTIVITY.**

Protein is vital for all living cells, including microbial cells that support healthy soil. One of the primary roles of microbes is to help circulate nutrients, including carbon, nitrogen, phosphorus, and sulfur. L-methionine, for example, can help increase the health of microbial cells and promote better microbial activity. Without microbial activity, most fertilizers would not be effective.
- 6 AMINO ACIDS ARE A SOURCE OF NITROGEN.**

Adding amino acids to the soil will increase nitrogen levels. Plants can then use these amino acids in the soil as an organic form of nitrogen.
- 7 CLEAN AND POLLUTION-FREE, IMPROVE THE ECOLOGICAL ENVIRONMENT.**

Amino acid fertilizers have no residues. This incredible efficiency can improve the soil's physical and chemical properties, water retention, fertility, and air permeability.



Although primarily serving as nutrients for the plant, some amino acids play additional roles as biostimulants. For example, L-Proline can reduce the effect and speed up the recovery time from abiotic stress by strengthening the cell wall. L-Glycine and L-Glutamic can chelate metal ion nutrients and facilitate plant uptake and movement into cells. For more information, refer to the references in the following table.

Total organic carbon (TOC)	25.15%	<i>Promotes soil structure or tilth. It also improves soil aeration, water drainage, and retention and reduces erosion risk and nutrient leaching. Enhances the biological diversity and activity in the soil</i>
Aspartic acid	2.35%	<i>Significantly improves nutrient uptake, especially phosphorus. Increases root branching and root hair development. Germination enhancer.</i>
Threonine	0.29%	<i>Help the plant use phosphates better and helps with water stress.</i>
Serine	0.53%	<i>Plays a vital role in plant metabolism and improves root development. Helps plants better regulate their stomata for better water use.</i>
Glutamic acid	5.19%	<i>Crucial for plant growth. A key component in the formation of vegetable tissues and chlorophyll synthesis.</i>
Proline	7.24%	<i>Protects plant tissues against temperature extremes and high concentrations of fertilizer salts. It may also increase pollen production.</i>
Glycine	13.28%	<i>Growth regulator that slows the maturation of some fruits by limiting ethylene production. Chelates nutrients.</i>
Alanine	5.69%	<i>Only Amino Acid that can operate in anaerobic and N-limiting conditions. Helps plants deal with flood conditions</i>
Cystine	0.02%	<i>Regulates plant growth, development, and protein synthesis and functions as a precursor for several plant defense compounds formed in response to environmental stressors</i>
Valine	1.24%	<i>Essential for plant growth, seed protection, and seedling boost.</i>
Methionine	0.31%	<i>A precursor to ethylene in the plant, it also increases ethylene's presence in the soil. Helps in steady ripening.</i>
Isoleucine	0.76%	<i>Necessary for protein synthesis and normal plant growth and a precursor to several secondary metabolites. Improves resistance to salt stress and detoxification.</i>
Leucine	1.45%	<i>Involved in plant defense and resistance to pathogens.</i>
Tyrosine	0.24%	<i>Essential for photosynthesis and an electron donor in chloroplasts. Helps manage plant fluids and pollination.</i>
Phenylalanine	0.97%	<i>Used for flavonoid synthesis, which may improve flavors. It also relates to lignin production for stronger cell walls.</i>
Lysine	2.17%	<i>Improves gene expression and hormone response. Regulates flower timing.</i>
Histidine	0.34%	<i>Increases the tolerance and transport of Nickle to the shoot. Helps in drought resistance.</i>
Arginine	4.60%	<i>Necessary for nitrogen reserve and recycling and is a precursor for polyamides. Polyamides are messengers involved in most physiological and biochemical processes, growth and development, and adaptation to stress. Induces flowering and root development.</i>



GUARANTEED ANALYSIS

Total Nitrogen (N) 9%
 8.88% Water Soluble Nitrogen
 0.12% Water Insoluble Nitrogen

Derived from: Soy protein hydrolysate.

 **DO NOT ALLOW TO FREEZE.**

 **SHAKE WELL BEFORE USE.**

Directions for Use: Shake well before diluting with water.

PROFESSIONAL	PROFESSIONAL	HOMEOWNER
Planting	2-4 quarts/Ac (5-9 L/Ha)	2 oz/gallon – Repeat weekly
Established	1-5 quarts/Ac (2-6 L/Ha)	1-2 oz/gallon – Repeat 2-4 weeks
Foliar	1-2 quarts/Ac (2-5 L/Ha)	1 oz/gallon – Repeat 2-3 weeks
Seed Treatment	0.25% or 8 oz/50 lbs. of seed (250 ml/100 Kg) diluted with water	
Hydroponics	1-2 oz/250 gallons of nutrient solution (30-60 ml/ 1000 Liters)	

**These standard recommendations can vary according to soil properties, cultivated crops, and local conditions.*

STORAGE

Store the product in a dry place, in the original container only. Keep the lid tightly closed. Keep away from open flame or intense heat. Store above 40oF.

WARRANTY

Because soil, weather, and crop conditions may vary, Plant Natural Innovations® makes no guarantees or warranties, whether expressed or implied, concerning the use of this product. The user of this product takes full responsibility and assumes all risks of usage or handling of this product, whether application instructions were followed or not.

NET CONTENT SIZES AVAILABLE

- ◆ 32 oz
- ◆ 5 Gallon
- ◆ 1 Gallon
- ◆ 55 Gallon
- ◆ 2.5 Gallon
- ◆ 275 Gallon

WEIGHT PER GALLON

10.47 lbs. (1.254 kg/l)

pH OF UNDILUTED PRODUCT

5.85

STORAGE LIFE

Typically, Two Years from the date of production, depending upon storage conditions.

AVOID CONTACT WITH SKIN, EYES, OR CLOTHING.

In case of contact, immediately flush skin, eyes, or clothing with plenty of water for several minutes.



Plant Natural[™]
I N N O V A T I O N S



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