**Plant-Prod® Fertilizers**

Plant-Prod is completely soluble, and in warm water goes into solution almost instantly. Plant-Prod stays dissolved and leaves no deposits in tanks or irrigation lines. High solubility allows the fertilizer to be applied through all injector systems and as a concentrated foliar application.

### 10-52-10 Plant Starter

Plant Starter 10-52-10 supplies the necessary high phosphorus levels that young plants require for rapid root growth without presenting the problem of poor solubility. This safe fertilizer has a low salt index, and contains no sulphates or harmful chlorides which can be particularly injurious to young plants.

Plant Starter is recommended:
- when transplanting seedlings or bedding plants,
- for field transplanting of tomatoes and cucumbers and during the early stages of crop development,
- for greenhouse crops when a high phosphorus fertilizer is required

### 12-0-44 Potassium Nitrate

Plant-Prod 12-0-44 is water soluble potassium nitrate supplemented with the Plant-Prod chelated micronutrient package. All nitrogen in this formula is in the nitrate form, making it ideal for periods of low light. 12-0-44 ensures more uniform plant growth during the winter and when finishing crops. This results in better colour and improved plant tone.

The high nitrate nitrogen and potassium content combined with the absence of phosphorus make it ideal:
- for Easter Lily culture,
- as a finisher for Chrysanthemums and Poinsettias,
- when sufficient phosphorus has already been incorporated into the soil,
- when alternated with other formulations for use on greenhouse tomatoes, and cucumbers, grown in soil.

### 12-2-14 Crystal Fertilizer

This formula is a water soluble crystal formulation designed specifically for plug production, but can be used as an “all-in-one” formula for many crops.

Features include:
- over 97% of the nitrogen is in the nitrate form, no urea
- the calcium to magnesium ratio is 2:1, as required for plugs.
- has a complete micronutrient package including high molybdenum.
- includes nitrogen, phosphorus, potassium, calcium and magnesium

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**Root Vegetables**

<table>
<thead>
<tr>
<th>Transplant</th>
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<th>15-30-15</th>
<th>12-2-14</th>
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<tbody>
<tr>
<td>Vegetative Growth</td>
<td>20-20-20 (foliar)</td>
<td>28-14-14 (foliar)</td>
<td>20-2-20</td>
</tr>
<tr>
<td>Flowering</td>
<td>15-30-15</td>
<td></td>
<td></td>
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<tr>
<td>Calcium &amp; Magnesium</td>
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**Field Drip Irrigation**

| Tomatoes, Cucumbers, Melons | 24-10-20 | 13-0-16 | 13-0-25 |
| Ornamentals | 18-6-20 - Poinsettias | 13-6-30 - Cyclamens |

www.PlantProd.com
15-30-15 High Phosphate
Plant-Prod High Phosphate is ideal for Hydrangeas. The high phosphorus content ties up excess aluminum in the soil, causing a strong pink colouration in the blooms. Acid-loving plants such as African Violets respond well to this formulation due to its high potential acidity.

This formula is recommended when higher phosphorus levels are required:
- during the early stages of crop growth, such as required by many greenhouse crops, particularly tomatoes and cucumbers grown in soil,
- to remedy phosphorus deficient soils.

18-6-20 Poinsettia Plus
Plant-Prod Poinsettia Plus was designed specifically for Poinsettias, and as an improvement to our successful 17-5-19 Poinsettia Fertilizer. This formulation may be used on other crops requiring lower levels of boron. Contains over 60% of the nitrogen in nitrate form, and a high level of magnesium and chelated micronutrients.

20-2-20 Low Phosphorus Fertilizer
Plant-Prod 20-2-20 helps keep the pH low and contributes very little phosphorus. This formulation in combination with Plant-Prod Solutions 14-0-14 is ideal for plugs and bedding plants. Plant-Prod 20-2-20, because of its potential acidity is very useful in maintaining an ideal pH balance in plug media. Also can be used for production of Blue Hydrangeas and Easter Lilies when excess phosphorus is not required.

Features include:
- complete micronutrient package including high molybdenum
- low phosphorus content
- 60% nitrate nitrogen and 40% ammoniacal nitrogen

15-15-30 Pot Plant Special
The Pot Plant Special supplies twice as much potassium as nitrogen, while still maintaining the optimal levels of the other plant nutrients.

It features:
- over 58% of the nitrogen in the nitrate form,
- a very low potential acidity, exhibiting minimal acidifying tendencies in the soil.

It is recommended:
- for periods of low light,
- when soil or tissue samples show low potassium levels,
- when plants are setting bud, as well as during maturation and blooming.

Use the Pot Plant Special on Pot Mums, Easter Lilies, Geraniums, and Gloxinias, and when finishing Poinsettias, and Chrysanthemums.

15-15-18 Soilless Feed
This formula meets the needs of growers who are using soilless growing media. It contains magnesium, and has an increased level of molybdenum in combination with the other five micronutrients. This formulation will supply sufficient nutrients to overcome most deficiency problems associated with soilless mixes.

Over 55% of the nitrogen is in the nitrate form which is preferable for soilless mixes. It is recommended for crops which require a high nitrate nitrogen content such as Bedding Plants, Easter Lilies, Poinsettias, and Chrysanthemums.

13-6-30 Cyclamen Fertilizer
This high nitrate formula is ideal for Cyclamen and Gloxinia. Plant-Prod 13-6-30 has 80% of its nitrogen in the nitrate form, providing a slightly basic reaction in the media.

Features include:
- complete micronutrient package including extra chelated iron
- high potash to nitrogen ratio content
- 80% nitrate nitrogen and 20% ammoniacal nitrogen, no urea.

14-0-14 Cal-Mag Fertilizer
This formula is a water soluble prilled formulation designed specifically for plug production, but is also useful as a source of calcium and magnesium.

Features include:
- over 90% of the nitrogen is in the nitrate form.
- includes magnesium nitrate, potassium nitrate, and calcium nitrate.
- the calcium to magnesium ratio is 2:1, as required for plugs.
- has a complete micronutrient package including high molybdenum.

15-0-15 Cal-Pot Special
The Cal-Pot Special is a completely water soluble prilled mixture of calcium nitrate, potassium nitrate and micronutrients. All nutrients are in a prilled form to improve flowability.

Over 90% of the nitrogen is in the nitrate form, and there is no urea. This makes it very effective under low light conditions. This formula can be used to raise media pH since it has an alkaline soil reaction.

www.PlantProd.com
**20-5-30 High Potash**
This formula is recommended for summer feeding of Roses, Geraniums, and other ornamentals. Greenhouse tomatoes and cucumbers grown in soil respond well to this formula when used alone or in combination with potassium nitrate. This high potassium fertilizer is ideal for use when plants are maturing and blooming. It allows the plants to establish heavier, thick-walled cells which results in good keeping qualities. Since the potential acidity is very low, this fertilizer will exhibit minimal acidifying activity in the soil. It is particularly useful where a change in soil pH is undesirable.

**20-8-20 High Nitrag All Season**
Recommended for growing in soilless mixes due to the high nitrate and higher concentrations molybdenum and magnesium, this product forms the backbone of many greenhouse growers’ nutritional programs. The higher concentration of molybdenum and magnesium ensures optimum nutrient availability in soilless mixes. With over 60% of the nitrogen in the nitrate form, this analysis is an ideal all season fertilizer and is particularly effective during low light conditions. With a complete micronutrient package, 20-8-20 is suitable for a wide range of crops, either alone or in combination with other analyses.

**20-10-20 Interior Landscape**
The Interior Landscape Fertilizer combines the nutritional benefits of a complete fertilizer with the convenience of no marking dye.

This formula features:
- over 60% of the nitrogen in the nitrate form, making it ideal for use any time of the year with both high and low light conditions,
- a higher concentration of molybdenum and magnesium for optimum nutrient availability in soilless mixes,
- no marking dye, so there is less chance of staining carpets and other materials.

**20-20-20 All Purpose**
The most widely used of all water soluble fertilizers is 20-20-20 All Purpose Fertilizer. It is very effective on all types of plants and because of its balanced formula, may be used whenever a more specific formula is not required. Alone or in combination with other analyses, it meets the nutritional requirements of many different crops.

It is recommended:
- for bedding plants,
- for foliage plants,
- when a balanced formula is required,
- as a foliar feed to correct nutrient deficiencies in various agricultural and horticultural crops

**24-10-20 Drip Irrigation**
This fertilizer has been developed to meet the specific needs of drip irrigation and the specialty agricultural market.

Features include:
- urea phosphate as a major nitrogen and phosphorus source, which is acid forming to keep drip lines and nozzles clean and free from plugging with irrigation water deposits.

This product is recommended where there is a need to lower the pH in alkaline water or soil conditions.

**28-14-14 High Nitrogen**
Crops such as cut flowers, container nursery stock and field grown vegetables respond well to this formula. It is very suitable for foliar feeding due to its very low salt index and high level of urea nitrogen. 28-14-14 is recommended for Orchids and many woody ornamentals because of its acid forming tendencies, resulting from its very high potential acidity.

This formula is designed:
- for use during periods of vegetative growth, when plants have a high nitrogen requirement,
- to correct nitrogen deficiency where soil or tissue tests show low nitrogen,
- for foliar feeding of nursery and agricultural crop

**21-7-7 Acid Fertilizer**
This formula has a very high potential acidity. It can be used in a continuous feeding program, but the pH should be monitored to ensure that it does not go below the desired level.

It is recommended:
- for crops requiring acid soil conditions such as Azaleas, Rhododendrons, and many evergreens. The nitrogen is provided in an ideal ratio of ammonium to urea for Azaleas.
- when irrigation water has a high pH, 21-7-7 will help to overcome the effect of the bicarbonate ions in the media and gradually reduce the pH for better growth of bedding plants, pot crops, cut flowers, and nursery stock in containers and in the field.

**www.PlantProd.com**
6-11-31 Hydroponic
This formula provides an excellent fertility program for greenhouse vegetable crops grown in Nutrient Film Technique (NFT), rockwool culture and other forms of hydroponic or soilless culture. It must be used with calcium nitrate for a complete nutritional program.

Features include:
- all the nitrogen is in the nitrate form, giving the grower complete control over the levels of ammoniacal nitrogen in NFT tomatoes.
- a high K:N ratio which provides the high potassium required by hydroponic vegetables.
- a unique micronutrient package designed especially for NFT production. Iron, manganese, copper and zinc are all chelated.

7-11-27 Hydroponic
This formula has been designed for use in conjunction with calcium nitrate to supply nitrogen, phosphorous, potassium, minor elements, calcium and magnesium at appropriate levels for hydroponic culture.

This hydroponic fertilizer is a good general formulation to use for crops grown hydroponically, as well as crops grown in substrate cultures such as rockwool and phenolic foam. Iron has been chelated with DTPA for better availability.

18-9-27 Hydroponic
Designed as a complete fertilizer for hydroponic growers and soilless culture growers. It contains chelated micronutrients necessary for good plant growth under hydroponic conditions. This formula is ideal for general hydroponic and soilless culture. It contains a good balance of nutrients to promote healthy growth of most ornamental plants and vegetables, with the convenience of all nutrients being in one package.
30-8-8 Tree Fertilizer
Plant-Prod 30-8-8 is a water suspendible fertilizer for root or surface feeding of landscape trees.

Features include:
- a significant portion of the nitrogen derived from slow-release, water-insoluble Nitroform® which provides a safe, long term supply of nitrogen,
- a complete micronutrient package for healthy plant growth,
- a very low salt index which guarantees tree safety. 30-8-8 Tree Fertilizer can be injected using a soil needle or drenched into the root zone.

It is ideal for spring or fall fertility programs.

11-41-8 Forestry Seedling Starter
Plant-Prod Forestry Seedling Starter provides tree seedlings with:
- the proper rate of nitrogen, phosphorus, and potassium for good root development
- twice the usual level of chelated iron.

It is recommended for use beginning two weeks after germination through eight weeks of growth thereafter.

20-8-30 Forestry Seedling Finisher
The Forestry Finisher is recommended for hardening seedlings in the fall by supplying low nitrogen, moderate phosphorus and a high level of potash. The levels of phosphorus and potassium encourage root development and increase plant resistance to frost and drought. Over 65% of the nitrogen is available in the nitrate form which prevents soft growth under low light conditions.

20-8-20 High Nitrage Forestry Seedling
Rapid vegetative growth of forest seedlings occurs between the 4th and 16th weeks of growth. 20-8-20 Forestry Special should be used on a constant feed basis to encourage good top growth. This formulation contains four times the iron as most Plant-Prod fertilizers, lower phosphorus, and added magnesium. It should be used for the majority of the growing season, once seedlings have a well established root system.

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Application
Plant-Prod can be applied by many different methods. High solubility makes it the ideal choice for both simple and complex fertilizer injector systems. Concentrated solutions can be easily prepared for application by conventional sprayers and by aircraft. Consistent conductivity in water for each analysis ensures that injectors which operate on this principle can use Plant-Prod with predictable and reproducible results. Plant-Prod can be applied as a spray on both agricultural and horticultural crops with no fear of foliar damage when used at recommended rates and considering climatic conditions.

For rates and technical information, please contact your local distributor, or visit www.PlantProd.com

Micronutrients
Plant-Prod contains a chelated microelement package of iron, zinc, copper and manganese manufactured with the chelating agent ethylene diamine tetraacetate (EDTA). This package, together with the elements boron and molybdenum, provide a level of the major micronutrients to satisfy most crops under a constant feeding program in both acid and alkaline conditions. The standard micronutrient content of Plant-Prod fertilizers is as follows:

- Boron (B) 0.02%
- Copper (Cu) 0.05%
- Iron (Fe) 0.10%
- Manganese (Mn) 0.05%
- Molybdenum (Mo) 0.0005%
- Zinc (Zn) 0.05%

NOTE: Specialty formulations for turf, forestry, hydroponics and soilless media will contain micronutrient packages that differ from this standard.

Purity
Plant-Prod NPK fertilizers for continuous feeding contain no harmful chlorides (less than 0.3%) or other undesirable elements to damage plant roots.

Compatability
Many pesticides can be mixed with Plant-Prod and applied in one application to save time and money. Plant-Prod is formulated to prevent the hydrolysis of most pesticides that can take place when pesticides and fertilizers are tank mixed. In fact, if you are forced to use alkaline water, the addition of Plant-Prod as a buffer can stop or reduce the hydrolysis reaction which can destroy the efficacy of the pesticide. Use only with pest control products that are recommended and labeled for use with fertilizers.
Master Plant-Prod Inc. has been Canada’s leading Horticultural Supplier since 1945. Our purpose has always been to ensure that professional growers maximize their success, and quality of their crops.

Plant-Prod fertilizers are manufactured using the purest ingredients for rapid and complete solubility. Solubility is a sign of the quality and purity of the materials used in creating our fertilizer, helping to ensure even distribution.

Master Plant-Prod has always been dedicated to producing the most innovative, highest quality, water soluble fertilizers on the market. Our exclusive TURBO™ milling process and our continuously monitored quality control system are firsts in the industry. In many countries, our customers consider our fertilizers to be the standard for quality and consistency. Master Plant-Prod Inc. markets water soluble fertilizers to more than 30 countries around the world.

To see the full range of our products or to view the label of a particular product, please visit our website at:

www.PlantProd.com