



**Agrium Advanced Technologies:
Your Source for Ultra Yield
Micronutrients**

As one of North America's largest integrated and diversified fertilizer companies, Agrium Advanced Technologies is a major growth-oriented producer of plant nutrients, a wholesale marketer of these nutrients, and a leader in the development of new products and services.

To find out more about Ultra Yield Micronutrients and other AAT products and services, contact your AAT representative. Or call toll-free: 1-800-292-3672 in the U.S., 1-877-247-4861 in Canada.

For agronomic information, call 1-800-661-NPKS.

Visit us on the Internet at <http://www.UltraYield.com>

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Ultra Yield Micronutrients from Agrium Advanced Technologies (AAT) help maximize crop production when incorporated into nutrient management and balanced nutrition strategies. Available in a variety of grades to fit your needs, Ultra Yield Micronutrients are manufactured to be dust free and uniform in size for excellent blending properties.

Ultra Yield Micronutrients offer a choice of products with either high water-solubility and low-analysis for maximum agronomic effectiveness or products with lesser water-solubility and high-analysis for agronomic effectiveness as well as logistical, inventory, and handling needs.

In keeping with AAT's philosophy of environmental stewardship, Agrium Advanced Technologies is committed to purchasing only the highest quality inputs for the manufacture of Ultra Yield Micronutrients.

- Latest technology in product manufacture
- Bags color-coded for easy identification of each Ultra Yield Micronutrient product
- All grades specially formulated for convenient blending
- All Ultra Yield products carefully screened to a targeted SGN of 250
- Available in bulk, 50 lb/25 kg bag, or 2000 lb/1 mt tote
- All Ultra Yield Micronutrients have been environmentally screened for safe use and treated with a superior dust-control coating
- Bagged product on non-returnable pallets with protective cardboard inserts and shrink-wrapped



Zinc

Zinc is an essential enzyme regulator in the synthesis of protein, starch, and growth hormones in plants. Crops grown on high pH, sandy, low organic, over-limed or leveled soils are often deficient in zinc. Other situations may benefit from a zinc application even when soil-test zinc is adequate. Beans, corn, sorghum, and wheat are especially sensitive to zinc deficiency.

Choose Ultra Yield EZ20 and Ultra Yield Zinc Sulfate 20% for a higher level of water-solubility, increased nitrogen, and sulfur content in a fertilizer designed to give maximum granule distribution for increased feeding sites. AAT Ultra Yield Zinc 40 offers a concentrated zinc fertilizer with the advantages of logistics, reduced storage needs, and less handling.

Manganese

Manganese is a part of several plant enzyme systems. It plays a role in photosynthesis by regulating the formation of chlorophyll, the plant's green pigment. Manganese deficiency is observed in soils with low manganese levels, as well as high pH, cold, and wet soils. Soybeans, wheat, oats, sugar beets, and sorghum are among the most responsive crops to manganese applications.

Ultra Yield BroadMan 20 and Ultra Yield Manganese 27 are excellent choices when increased granule distribution and increased water-solubility is needed. Ultra Yield BroadMan 20 was developed to be an effective manganese fertilizer for both broadcast and band applications. Ultra Yield Manganese 40 is an economical choice for supplying medium water-soluble manganese in high-analysis blends.

Boron

Boron is an essential nutrient in growth and development of new cells. Boron regulates flowering, pollination, seed development, and sugar transport. Organic matter is the most important natural source of boron in soils. Low organic matter, slow organic matter decomposition, high soil pH, and leaching of boron can lead to boron deficiencies in sensitive plants. Alfalfa, corn, sugar beets, cotton, peanuts, and cabbage-family crops (canola, broccoli, cauliflower) have the highest boron requirements.

Ultra Yield Boron 10 and Ultra Yield Boron 15 are both highly water-soluble sources of boron. Ultra Yield Boron 10 offers 33% more granules per acre than Ultra Yield Boron 15. Ultra Yield Boron 15 provides more concentrated boron for inventory management, handling, and logistics. Ultra Yield Boron 15 is the most water-soluble boron product available.

Calcium

Calcium is a critical nutrient for high quality fruits, vegetables, and potatoes. Calcium, a component of cell walls and membranes, helps regulate cell growth and maintains cell integrity. Ultra Yield GranUmite provides an excellent source of calcium.

Sulfur

Sulfur is an essential nutrient for many plant functions. Sulfur, a component of protein and various enzymes, helps to regulate the conversion of inorganic N into protein. Most vegetables, fruits, and row crops are highly responsive to sulfur.

All Ultra Yield Micronutrients provide sulfate sulfur for immediate sulfur availability.

Iron

Iron performs essential functions in chlorophyll synthesis, energy transfers, and is a component of several key plant proteins. Iron deficiency, also known as iron chlorosis, commonly occurs in high pH, low organic matter, and poorly aerated soils. High levels of phosphorus, manganese, and nitrogen can also induce iron chlorosis. Turf and many ornamentals are sensitive to iron deficiencies. Soybeans, corn, sorghum, and dry beans may also show iron chlorosis.

Horticulturalists and turf professionals prefer Ultra Yield iron products to maintain healthy green plants. Ultra Yield Iron Sulfate 20 is specifically designed to offer high water-solubility and low-analysis for maximum granule distribution and agronomic effectiveness. Ultra Yield Iron 50 offers a concentrated iron fertilizer with the advantages of logistics, reduced storage needs, less handling, and low-staining characteristics.

Copper

Copper is a critical regulator of several plant enzyme systems and is needed for protein synthesis and nitrogen metabolism. Plants only require small amounts of copper; but it is as important as nitrogen or any other essential nutrient. Cereal grains (especially wheat) and citrus crops are most sensitive to low levels of copper.

Copper deficiencies most commonly appear in sandy soils and organic soils, such as peats and mucks, but may be observed in a wide range of conditions. High soil pH and high levels of nitrogen, phosphorus, zinc, and iron can aggravate copper deficiency.

Ultra Yield Copper 12 and Ultra Yield Copper 20 are effective sources for preventing or correcting copper deficiencies. Ultra Yield Copper 12 is a highly water-soluble fertilizer coupled with a low-analysis to address the specific needs of copper correction. As copper application levels are generally only a few pounds per acre, a low-analysis product will provide maximum granule distribution. Ultra Yield Copper 20 offers a concentrated copper fertilizer with the advantages of logistics, reduced storage needs, and less handling.

Magnesium

Magnesium is considered a secondary nutrient and is needed by plants in larger quantities than micronutrients. Magnesium activates more enzyme systems than any other plant nutrient and is the central molecule in chlorophyll. Magnesium is often deficient in sandy soils and acid soils limed with calcitic limestone. High rates of ammonium-nitrogen and potassium may also induce magnesium deficiencies. Corn, beans, wheat, cotton, potatoes, sugar beets, and especially alfalfa, have high magnesium requirements.

Ultra Yield Magnesium 36 is an excellent fertilizer for the correction of magnesium deficiencies. Ultra Yield Magnesium 36 is especially effective when used for maintaining targeted magnesium nutrient ratios.

Custom Multi-micronutrient Products

The AAT Ultra Yield Micronutrient product line includes micronutrient blends specially formulated to supply multi-micronutrient nutrition in a fully homogenous granule. AAT Ultra Yield Corn Mix and Ultra Yield Bean Mix are manufactured to provide convenient micronutrient base blends well suited for meeting nutrient requirements in starter fertilizers or when blending with other granular products. Agrium Advanced Technologies can manufacture custom micronutrient blends that are customer, crop, or geographic specific.