AZOMITE SOIL PRODUCTS, LLC

FAQS



What is AZOMITE®?

AZOMITE® is a natural mineral substance which is mined directly from its Utah desert source. OMRI-Listed for organic production, AZOMITE® can be used as an agricultural fertilizer and/or soil amendment product, It is easy and safe to use and good for the environment. Many nutrient elements have been depleted from soils worldwide due to weathering, leaching, and depletion from decades of continuous agricultural production and AZOMITE® been reported to replenish these nutrients. Technically, AZOMITE® is a highly mineralized complex silica ore (Hydrated Sodium Calcium Aluminosilicate or HSCAS), mined in Utah from an ancient deposit left by a volcanic eruption that filled a small seabed an estimated 30 million years ago.

Where does AZOMITE® come from?

AZOMITE® is mined from an ancient volcanic ash deposit in central Utah, USA. Scientists believe that the unique chemical make-up of AZOMITE® was created when an ancient volcano erupted and the ash settled into a seabed. The combination of seawater and volcanic ash created the AZOMITE® mineral composition unique to its deposit. Today, this geologic characteristic is an outcropping known as a "hogback". The minerals are gathered and packaged by AZOMITE® Mineral Products, Inc. for distribution all over the world.

What does the name AZOMITE® mean?

AZOMITE® (pronounced ā-zō-mite) is an acronym created and registered as a trademark by its founder Rollin Anderson, for the "A to Z Of Minerals Including Trace Elements".

What effect does AZOMITE® have on plants?

According to research and customer reports, plants grown with AZOMITE® produce more and larger fruits and vegetables per plant that are better tasting — with evidence of improved nutritional benefits. AZOMITE® has shown these positive results in a wide variety of plants in both field and laboratory.

What AZOMITE® Mineral Products are available?

AZOMITE® is available in five forms including UltraFine, Micronized, Field Grade, Pelletized, and Granulated. UltraFine AZOMITE® powder is 90% passing a 450 mesh screen and is the finest available AZOMITE® grade, It is perfect for injecting into trickle or drip irrigation systems, can be added to a spray tank, or mixed in a watering can for Home Lawn & Garden use. Micronized AZOMITE® powder is 90% passing a 200 mesh screen and can be mixed with potting soil, compost, or spread by hand in the garden or other agricultural production areas — or used in hydroponic or liquid application systems where strong agitation and proper filter, emitter, and/or nozzle sizes are in place to allow the non-soluble particles to flow through. It is rather dusty to handle. Field Grade AZOMITE® appears as coarse, irregularly sized particles. It can be applied with a spreader, creating a spread pattern that is less than that of granular or pelleted due to the inconsistent particle size. It is less dusty to handle than Micronized. Granular AZOMITE® is produced by forming the Micronized particles into granules with the addition of a binder material, which also contains beneficial soil and plant nutrients. Granular AZOMITE® takes several days to break down in the soil once it is applied and exposed to irrigation or rainfall. Pelletized AZOMITE® is extruded into easy to apply pellets measuring about 2.5 mm in length and can be applied by hand, or with spinner, tail-wager, or drop spreaders, and breaks down into fine powder immediately when in contact with water, rain or irrigation.

Will AZOMITE® work on any soil?

Yes, it will work on any soil, anywhere in the world! AZOMITE® Mineral Products has documented numerous University, fertilizer company, AZOMITE® Distributor, and farmer field test research results. These show positive results on a variety of soils and plants all over the world. The pH of AZOMITE® itself is alkaline, however adding AZOMITE® does not seem to raise the pH of the soil or soil-water, so it can be used on any pH soil or soil type.

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What types of plants is AZOMITE® effective on?

AZOMITE® tests have reported positive results in many plant species including: wine grapes, table grapes, sugarcane, potatoes, rice, watermelon, tomatoes, melons, cantaloupes, onion, garlic, papaya, lemons, oranges, cocoa, coffee, mango, oaks, pines, peaches, chilies, berries, eggplant, tobacco, ornamentals, wheat, corn and many others. AZOMITE® is uniquely capable of nourishing all plant life as it provides nutrients that the native soil is often lacking.

How is AZOMITE® applied to the soil?

Micronized AZOMITE® is a fine powder (around minus 200 mesh) and since it is a dusty product, must be applied by machinery that applies products like dry lime, hand applied, or mixed with compost or other similar soil treatments for application. AZOMITE® Field Grade is moderately dusty and is available for easy soil application in a broadcast or drop spreader, or by hand, although the spread pattern will not be as even as that with granular or pelleted due to the inconsistent particle size in the Field Grade product. Granular AZOMITE® can be applied by hand, or with spinner, tail-wager, or drop spreaders. Granular AZOMITE® takes several days to break down in the soil once it is applied and exposed to irrigation or rainfall. Pelletized AZOMITE® can be applied by hand, or with spinner, tail-wager, or drop spreaders, and breaks down into fine powder immediately when in contact with water, rain or irrigation.

Aren't all minerals necessary for plant growth already in the soil?

The world's cropland has been under cultivation for many decades and each crop cycle removes trace minerals from the soil or the elements are lost through erosion and pesticide use. Since most fertilizer programs only replace Nitrogen (N), Phosphorus (P) and Potassium (K), crops become deficient when the soil has been depleted of its trace elements. Plants can complete their life cycle without the full range of minerals but will not produce at their full potential with optimum resistance to disease.

How is AZOMITE® different from fertilizer?

Most conventional fertilizers contain mainly Nitrogen (N), Phosphorus (P) and/or Potassium (K), which are called macronutrients. Plants require macronutrients and essential secondary micronutrients to produce top yields and quality production. When choosing a fertility program, growers often neglect secondary and/or trace minerals and focus primarily on NPK. For plants to complete their life cycle and produce at full potential, a broader range of minerals is necessary. AZOMITE® is a naturally occurring source for nutrients that does not harm the environment and is OMRI-Listed for use in organic production.

What is the Law of the Minimum?

The "father of fertilizer", Justus von Liebig, developed the "Law of the Minimum" which is important in understanding what AZOMITE® does. The Law states that plant growth is determined by the scarcest "limiting" nutrient; if even one of the many required nutrients is deficient, the plant will not grow and produce at its optimum. Conventional fertilizer programs may focus solely on the macronutrients like Nitrogen (N), Phosphorus (P) and Potassium (K). However, if one of the many essential secondary and/or trace elements is deficient in the soil, the plant will not perform at its optimum, affecting yield and immune function.

If a farmer uses AZOMITE®, can other fertilizers be reduced?

AZOMITE® supplies secondary elements (Ca and Mg) and Potassium (K), and does not provide Nitrogen (N) or Phosphorus (P), therefore farmers should not reduce any part of their fertility program that provides N or P. AZOMITE® use has shown increased yields and improved soil and plant performance when added to a complete fertility program. Most farmers report a more rapid rate of growth, increased yields and quality within one harvest.

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Can too much AZOMITE® be toxic?

No. AZOMITE® is 100% naturally derived and completely free from fillers. It is not chemically altered, and its natural, nontoxic composition will not harm plants or the environment.

Is AZOMITE® organic?

AZOMITE® Micronized Trace Minerals, AZOMITE® Granulated Trace Minerals and AZOMITE® Micronized are listed by the Organic Materials Review Institute (OMRI) for use in organic production. Many fertilizers receive chemical alterations or go through an intensive manufacturing process. AZOMITE® is simply mined, crushed, and may be granulated or pelletized, and then sold and is 100% natural. Chemically, the term "organic" means that the minerals are bound to a carbon atom. As the minerals in AZOMITE® are oxides, not bound to carbon, they are technically considered "inorganic".

Is AZOMITE® a Bentonite?

No, Bentonite is an absorbent aluminum phyllosilicate. AZOMITE® is a Hydrated Sodium Calcium Aluminosilicate (HSCAS), <u>and does not swell.</u>

Is AZOMITE® a rock dust?

Yes, but it is very different from the few glacial rock dust products on the market. AZOMITE® is a mineralized, compacted volcanic ash in origin, which makes it volcanic rather than glacial.

Does AZOMITE® contain heavy metals?

In far lesser amounts than exist in a typical soil sample. Chemically, AZOMITE® is a hydrated sodium calcium aluminosilicate (HSCAS), which carries a U.S. Food and Drug Administration (FDA) "Generally Recognized as Safe" (GRAS) classification. In addition, AZOMITE® is listed for certified organic agriculture use by the Organic Materials Review Institute (OMRI) and the CA Department of Agriculture. AZOMITE® is a natural product from the Earth, which has not been chemically altered and cannot harm the environment.

What is the Cation Exchange Capacity for AZOMITE®?

Cation Exchange Capacity (CEC) refers to the capacity of exchange between a cation (a positively charged ion) in solution, in the soil, and another cation on the surface of any negatively charged material such as AZOMITE®. CEC is a measure of soil fertility, and the soil or product's nutrient retention capacity and the capacity to protect groundwater from cation contamination. AZOMITE®'s typical CEC range is 25 - 30 meq/100 g.

Is AZOMITE® available for human consumption?

We do not market AZOMITE® for human consumption.

Is AZOMITE® radioactive?

No. AZOMITE® is not radioactive and does not have the capacity to emit alpha particles, which can harm humans or animals. The findings of a gross alpha/beta test report prepared by the ALS Environmental Laboratory Group of Fort Collins, Colorado, reveal that the alpha radiation values present in AZOMITE® are lower than those from a sample taken from the ALS parking lot. Beta emission is actually consistent with the potassium in AZOMITE®. AZOMITE®'s alpha number, averaged from 6 samples, gave a value of 5.8 pCi/g. A value greater than 20 pCi/g is required to even warrant documentation.