

## AGROLITE Vermiculite

### Description

Agrolite Vermiculite is a Mica like particulate mineral (Chemical hydrated magnesium aluminum silicate) which expands around 15 times in volume by popping effect when heated to 1,600°F. The resultant expansion enhances the substance's moisture absorption and water retention capabilities as well as allows free air passage i.e. the vital aeration to the roots of the plant. The long life inorganic material is clean, odorless and lightweight and contains all required plant nutrients. It is free of pathogens, weeds, diseases and decompositions. Its high cationic exchange properties provide controlled fertilizer feed to the plant and regulates the pH of the soil. Neutral in reaction and insoluble in water, it is able to absorb large quantities of water 3 to 4 gal/cu.ft. It can be mixed with low pH components like peat moss and is compatible with fertilizers and chemical pesticides.

Properties like water retention and aeration makes vermiculite a catalyst for rapid germination of seeds and the nutrient support the fast growth of the plant. That makes it a common ingredient in potting media. One of the most important combinations is vermiculite with sphagnum peat moss.

### Features

- Inorganic and does not deteriorate. Lasts for over 20 years.
- Exhibits excellent water retention
- Improves aeration of soil
- Has a pH of 6.2-7.0
- High cationic exchange capacity
- Has available plant nutrient
- Sterile locally exfoliated at 1600°F
- Free from weeds and diseases
- Serves as an effective insulator to reduce soil temperature
- Clean, odorless, lightweight, easy and safe to handle

### Applications

- Seeds raising – **Agrolite** encourages quicker germination and improves growth. Use Agrolite for large and medium size fine seeds.
- Planting trees and shrubs – **Agrolite** increases water holding capacity and aeration. **Agrolite Vermiculite** is suitable for most trees and shrubs.

- Hydroponics – **Agrolite Vermiculite** Insert, sterile lightweight aggregate is ideal for hydroponics. Use **Agrolite** for most applications.
- Rooting cuttings – **Agrolite** speeds up rooting and provides an optimum balance of air and water. **Agrolite** is recommended for very fine cuttings.
- Potting compost – **Agrolite** mixed with other components and nutrient is suitable for most potting and container composts. It improved aeration, drainage, insulation and facilitates rewetting.
- Soil conditioning and turf dressing – **Agrolite Vermiculite** improves texture of heavy soils by increasing aeration and drainage. **Agrolite** is suitable for most soil conditioning applications. It is also recommended for improving glasshouse soil for hand-drawn vegetable plants.

### Chemical Analysis

SiO <sub>2</sub>	38-46%
MgO	16-24%
Al <sub>2</sub> O <sub>3</sub>	11-16%
Fe <sub>2</sub> O <sub>3</sub>	8-13%
K <sub>2</sub> O	4-6%
CaO	1-3%
TiO <sub>2</sub>	1-3%
MnO <sub>2</sub>	0.1-0.2%
Cr <sub>2</sub> O <sub>3</sub>	0.05-0.2%
Na <sub>2</sub> O	0.1-0.3%
Others	0-0.5

### Physical Properties

Color	Brown
Size	0-3mm
pH	6-7.5
Water retention	530%
Air porosity	24-44
Cationic exchange capacity (me/100g)	Approx. 75
Incombustibility	2000°F