



Sun Silicates is the only South African manufacturer that can supply both perlite and vermiculite to the industry.

WHAT IS PERLITE?

Perlite is a non-toxic, naturally occurring siliceous volcanic rock. Perlite is formed by the rapid cooling of viscous magma or lava. The distinguishing feature which sets perlite apart from other volcanic glasses is that when heated to a suitable point in its softening range, it expands from four (4) to approximately twenty (20) times its original volume! Perlite is an inert and odourless mineral and is 100% safe to use!


Our SunPerl perlite is used in the following industries:

1. Soil mixtures
2. Hydroponics
3. Insulation
4. Refractory materials
5. Filtration of oils
6. Filtration of beer, wine and fruit juices

- Perlite have been successfully used in virtually all horticultural applications including glass-house growing, landscaping, lawn and stadium turf and in a variety of container applications.
- Time and time again it has proven its superiority in meeting the needs of commercial growers and home gardeners – hydroponic culture is no exception.
- Extensive testing has documented the superiority of perlite over other methods of hydroponic culture.
- Roots in perlite are always well aerated and watered.
- Perlite is physically stable and will retain its excellent air/water balance for many years if handled carefully. Some growers have used perlite for tomatoes more than one growing season and it has subsequently been re-used for potting mixes and soil conditioning.



“successfully used in virtually all horticultural applications”



Perlite culture is a cost-effective growing medium, by avoiding water and fertilizer wastage because of perlite’s excellent capillary attraction of water and nutrients!

THE BENEFITS OF USING PERLITE

- Horticultural perlite provides constant moisture status around the roots at all times, irrespective of weather or stage of root growth of the plant.
- Perlite ensures even watering throughout the growing area
- There is less likelihood of overwatering with horticultural perlite
- Perlite culture avoids wastage of water and nutrients
- The use of perlite eliminates the need to grade growing floors accurately
- Perlite is sterile / inert because it is processed in our furnace at 950 °C
- Perlite increases root aeration. Insufficient oxygen in crops or plant yields poor results.
- Perlite can be re-used if it has been sterilized.



SunPerl Vermiculite is a sterile, odorless and fireproof mineral. Along with another naturally occurring mineral – Perlite – it's often added to potting soil or used in the horticultural and hydroponic industries.

WHAT IS VERMICULITE?

Vermiculite is a hydrated magnesium aluminium silicate mineral, and can be found in various countries across the world. These countries include Australia, Brazil, Bulgaria, Kenya, Russia, South Africa, Uganda, USA and Zimbabwe. Vermiculite is non-carcinogenic and 100% safe to use.

The endless other uses of vermiculite mean that every gardener should have a bag at their disposal at all times!

THE BENEFITS OF USING VERMICULITE

- **IMPROVES AERATION:** By adding vermiculite to the soil you can improve the soil's ability to hold and release water back to the plants. Vermiculite is porous and therefore will hold high levels of air in soils which is essential for root respiration and for the existence of soil micro-organisms.
- **ENHANCES DRAINAGE:** SunPerl Vermiculite is extremely absorbent. It soaks up the water and holds that water until the soil starts to dry out. It then releases the water into the soil.
- **ACTS AS A PERMANENT SOIL CONDITIONER.** Unlike compost, which eventually breaks down into the soil, vermiculite doesn't break down.
- **MAKES OTHER MINERALS AVAILABLE:** SunPerl Vermiculite naturally reacts with soil compounds and makes available other nutrients such as calcium, potassium and magnesium. Vermiculite has an excellent cation-exchange capacity (CEC) and buffering capacity. Vermiculite also protects ground water from cation contamination, furthermore it supplies potassium (important growth catalyst in plants) and Magnesium, which has an important role to play in the formation of chlorophyll and photosynthesis.
- **FLOWER ARRANGEMENTS:** Vermiculite can be used when arranging flowers. This eliminates the need to change the water, eliminates spills and keeps blooms fresh for days.
- **GROWING MEDIA:** Vermiculite can be used in hydroponics and soilless growing systems. These are beneficial in that little or no water or nutrients are wasted or washed away. The benefits here include the reuse of water and nutrients as well as full control over watering and nutrient levels that the plants receive