



PERLITE

Perlite:

- is a naturally-occurring non-toxic, expanded volcanic rock;
- has been heated to a high temperature to produce a lightweight micro-porous structure;
- is an excellent additive for compost to improve aeration, water management and insulation properties in growing media;
- holds less water than peat so it produces a well-drained environment for root growth. and
- is inert, sterile and has a neutral pH.

Source

The source of the ore for the manufacture of perlite is a naturally occurring siliceous volcanic rock. This is quarried, crushed and screened into closely graded fractions.

Manufacture

Perlite is converted into expanded perlite by heating it in a furnace. When quickly heated to above 870°C (1600°F) the crude rock pops in a manner similar to popcorn as the combined water vaporizes and creates countless tiny bubbles in the heat-softened, glassy particles. It is these tiny glass sealed bubbles which account for the light weight and excellent insulating properties of expanded perlite.

Chemical Properties

The mineral is an aluminium silicate and, under normal conditions, is chemically inert. Typical composition of expanded perlite is:

Silicon (SiO₂): 73%; Aluminium (Al₂O₃): 15%; Iron (Fe₂O): 2%; Sodium (Na₂O): 3%; Potassium (K₂O): 5%; Calcium plus Magnesium (CaO+MgO): 1%; Other: 1%

Grades

HGGS stocks two grades of perlite, which are based on nominal particle sizes:

- Standard: 2.0 to 5.0 mm
- Super Coarse: 3.0 to 6.0 mm

Directions for Use

Use at 10 to 20% by volume.