

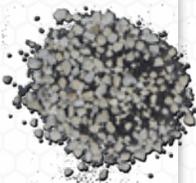
**KNOWN WORLDWIDE FOR SIMPLY THE BEST...
...NATURAL FERTILIZER & SOIL BUILDERS!**

WHAT IS PUMICEPLUS® ?

PumicePlus is an engineered soil developed in coordination with a green roof expert with installations across North America and around the world. PumicePlus is composed of two parts, an inert material that ensures structural integrity, and carefully selected growing inputs which provide the foundation for healthy root growth. It aids in the establishment and long-term health of plants when used in green roofs, green walls, containers, landscaped spaces, or specialized soil projects.

A UNIQUELY FORMULATED GRANULAR

PumicePlus combines a granular mix of premium ingredients including Sustâne Aerobically Composted Turkey Litter, Coconut Coir, Non-GMO Corn Gluten Meal, Langbeinite, Worm Castings, Humates, Seaweed, and Mycorrhizal fungi. **Each ingredient has been micronized and combined into every individual granule** to create a supercharged grow media that is rich in biostimulants and microbiology essential to healthy plant growth.



WHY PUMICE STONE?

Pumice (right) is the cornerstone component of PumicePlus and provides many advantages:

- It is highly porous and holds both water and air—critical to well-conditioned, aerated soils.
- Pumice has a naturally lightweight structure which provides an excellent platform for microbial colonization. This creates an ideal balance between drainability, moisture retention and gas exchange in the root zone.
- Pumice has a rough surface texture which provides the benefit of creating stable installations that might otherwise be prone to compacting, contracting, shifting or swelling - keeping landscapes true to form.



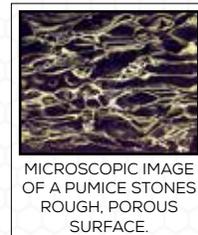
PROVIDES A STABLE PLATFORM FOR GROWING ANYWHERE WITH A LIGHTWEIGHT, NUTRIENT RICH MEDIUM

WHERE PUMICEPLUS EXCELS

PumicePlus is ideal for green roof installations, allowing excess water to drain, while maintaining ideal moisture levels, and plant nutrition for consistent healthy plant growth. It is superb as a grow media in tree trenches, planters and pots with nearly zero shift or compaction, yet provides complete plant nutrition for rich greening and lasting growth.

PUMICEPLUS BENEFITS

- **Reduces soil compaction and loosens heavy soils**, increasing aeration and drainage. This allows oxygen to enter the root system, and carbon dioxide respired by the roots to exit. The exchange of gases in the root zone is critical to having healthy and vibrant plants.
- Contains millions of micropores that allow it to **store water, nutrients and microbiology** and releases them slowly back into the soil. This creates a water and nutrient bank that will prevent runoff and save valuable resources for when they are needed most.
- **Supplies humic acid**: Humates increase nutrient uptake, drought tolerance, promote beneficial microbial activity and buffer soils.
- Contains an **optimal balance of primary, secondary, and micro-nutrients** needed for optimal plant growth.
- **PumicePlus is pH Neutral** and improves buffering against changes in soil pH.
- **Increases the soil's cation exchange capacity** and improves soil structure, porosity, and stability leading to greater root development.
- **Safe for plants, people and the environment.** As a naturally occurring, and easily accessible material, pumice has a 1300% smaller carbon footprint than other mined soil media. No water, no heating, and no chemicals.



MICROSCOPIC IMAGE OF A PUMICE STONES ROUGH, POROUS SURFACE.

HOW IS PUMICEPLUS USED?

PumicePlus can be used alone or as a soil conditioner that can be blended with soil, compost, peat or any type of growing media to create optimal growing conditions.



Soiless Grow System:

Use up to 100% PumicePlus as a media in hydroponic or soiless grow system.

Green Roof Installation:

Use up to 100% PumicePlus as the media in a Green Roof installation.

Landscaping and Containers:

PumicePlus improves soil structure, cation exchange capacity and both enhances and diversifies soil biological activity while holding its place. This ability to remain stationary is key in sculpted landscape, terraced hillsides, tiered or garden walls and other unique plantings. Particular effective in tree trenches and plantings with pavers prone to sinking, buckling or contracting. Also ideal for container gardening, planters, troughs, and grow boxes.

Potting Mix Enhancement:

Blend between 10% and 50% PumicePlus by volume with compost, peat moss, garden soil or any potting mix to create an enhanced growing media.

Soil Preparation:

Light, High Sandy Soil: 21 lb. per 100 ft² (9.5 kg per 9.5 m²) of bed
 Medium, Clay Loam Soil: 15 lb. per 100 ft² (7 kg per 9.5 m²) of bed
 Heavy, Silty, Clay Loam: 9 lb. per 100 ft² (4 kg per 9.5 m²) of bed

Bioretention & Ecological Restoration

For bioretention, restoration of disturbed soils, and revegetating areas where topsoil has been removed or badly damaged, incorporate 150 lb. PumicePlus per 1,000 ft² (75 kg per 100 m²) into the damaged soil. It can also be used for filtration and erosion control. Use PumicePlus in berms, erosion control socks, or as a layer for drain tile to remove suspended solids, phosphorus, metals, and oil from runoff through physical straining, ion exchange, carbonate precipitation, and biofiltration.



Specifications:

Organic Matter.....	~15%	Humic Acid.....	0.8%
pH.....	7.5	Carbon:Nitrogen(C:N).....	10:1
Bulk Density (lb/ft ³).....	45	Moisture Content.....	<5%
Particle Size.....	0.6mm - 9.5mm	Hardness.....	6 (MOHS)
Total Pore Space.....	64%	Water Permeability.....	>113 in./hr.
Air Filled Porosity.....	25%	Water Holding Capacity.....	40%

Non-Plant Food Ingredients:

Pumice.....	58%
Zeolite.....	24%
Peat.....	4.75%
Coconut Coir.....	3.1%
Humic Acid.....	0.8%
- derived from lignite and composted turkey litter	
Kelp (Ascophyllum nodosom).....	0.4%
Arbuscular Mycorrhizae Inoculum.....	1%
<i>Rhizophagus irregularis</i> 1.05 spores/g, <i>Rhizophagus clarus</i> 0.15 spores/g, <i>Septoglo-</i> <i>mus deserticola</i> 0.15 spores/g, <i>Claroideoglo-</i> <i>mus etunicatum</i> 0.15 spores/g	

Guaranteed Analysis:

Total Nitrogen (N)	0.20%
0.02% Ammoniacal Nitrogen	
0.02% Water Soluble Organic Nitrogen	
0.16% Water Insoluble Organic Nitrogen*	
Available Phosphate (P ₂ O ₅).....	0.20%
Soluble Potash (K ₂ O).....	0.20%
Calcium (Ca).....	0.30%
Magnesium (Mg).....	0.10%
Sulfur (S).....	0.20%
Derived from aerobically composted turkey litter, corn gluten meal, greenwaste compost, worm castings and langbeinite.	
*0.28% slowly available nitrogen from aerobically composted turkey litter and feather meal.	

Item #	Package Size	Units / Pallet
Sustāne PumicePlus		
50-20-0011	50 lb. bags	40 bags / pallet
50-20-0051	1-ton tote	1 tote / pallet

DISTRIBUTED BY: