PlanterCell® Planting Media

Engineered growing media designed to optimise drainage, water retention, and plant health across urban greenery systems.

Selection Guide

Planting Media	Function	Best For
Biochar	Soil Conditioner	Nutrient Boost
Planting Mix	Base Medium	General Planting
Perlite	Aeration	Drainage Improvement
Pumice Stone	Drainage	Strcutual Stability
Vermiculite	Retention	Moisture Control

APPLICATIONS:

- Green roofs and planter systems
- Vertical greenery and green walls
- Landscaping and soil conditioning
- Indoor and outdoor planting

BENEFITS:

- Enhances drainage, aeration, and moisture retention
- Supports healthy root growth
- Lightweight and easy to handle
- Sustainable and reusable materials

PlanterCell® Biochar







PlanterCell® Biochar is a sustainable biochar for horticulture and agriculture. It improves water and nutrient retention, supports healthy soil, is safe for edible crops (SS 698 compliant), and is certified by EBC and IBI for quality and consistency.

Tech Specs	UOM	PlanterCell® Biochar
Material		Wood chips
H/Corg Ratio		< 0.50
pH		8.4
Organic Carbon	%	81.1
Ash	%	3.6
Standard Conformance:		
European Biochar Certiþcate (EBC)		Yes
International Biochar Initiative Certiþcate (IBI)		Yes
Singapore Standard 698		Yes
Organic Contaminants:		
Polycyclic Aromatic Hydrocarbons (PAHs)	mg/kg	< 4
Dioxin / Furan	µg/kg	< 0.017
Polychlorinated biphenyl (PCBs)	mg/kg	< 0.2

PlanterCell® Planting Mix







PlanterCell® Planting Mix 80-20 is a lightweight, soil-less mix of organic and inorganic materials, ideal for green roofs, walls, and landscaping. It retains moisture well, reducing dust and keeping plants hydrated.

Tech Specs		UOM	PlanterCell® Planting Mix
Material			Inorganic Compound
Pack Size:		/	40
Grain Size		mm	0.063 to 14
Fine Particles (<0.063mm)		% by mass	5.0
Air Filled Pore Space		% by vol.	24.5
Density:	Dry	kg/m³	429
	Wet	kg/m³	962
Organic Content		% by mass / volume	0.52
ph Value			5.00
Soluble Salt Content		Cl-(g/L)	0.40
Water Holding Capacity		% by vol.	53.3
Water Infiltration Rate		cm/s	0.24

uniseal

Tel: +65 6755 0055
Fax: +65 6753 1398

Email: info@unisealsg.com
Facebook: www.facebook.com/unisealsg

Edition: 13.1.1 Jun 2026. All Rights Reserved
Last Update: June 2026

Disclaimer: All Information, specifications, data, illustrations presented in this document although correct at the time of publication are not legally binding. Some information are based on third party sources we believe reliable and we do not assure its accuracies or completeness. There may be changes subsequent to publication. Technical data may vary slightly due to source of raw material. Subject to the care and method of application, deviation in performance may occur.

PlanterCell® Perlite









Tech Specs	UOM	PlanterCell® Perlite
Material		Natural Siliceous Volcanic Mineral
Colour		White
Pack Size:	l	100
Grain Size	mm	1 to 3
Bulk Density	kg/m³	60 - 100
Soйening Point	C°	871 - 1093
Fusion Point	C°	1260 - 1343
pH Value		6.5 - 7.5
Thermal Conductivity	W/m.k	0.04 - 0.07

PlanterCell® Perlite is a lightweight, natural volcanic mineral that improves soil drainage and aeration, loosens compacted soil, and reduces caking. With a neutral pH (6.5–7.5), it is ideal for seedlings and cuttings propagation.

PlanterCell® Pumice Stone







PlanterCell® Pumice Stone is a lightweight, porous volcanic rock ideal for green roofs and vertical planting. It improves soil aeration, retains moisture, holds nutrients, and reduces watering needs. Being inorganic and pH-neutral, it doesn't decompose, compact, or attract pests, and can be reused.





Tech Specs		UOM	PlanterCell® Pumice Stone	
Grain Size		mm	± 1 to 11	± 5 to 15
Pack Size		l	40	
pH value			6.97	
Electrical Conductivity		mS/cm	0.22	
Nitrogen		mg/kg	140	
Soluble				
	Phosphorus	mg/L	0.19	
	Potassium	mg/L	9.55	
	Calcium	mg/L	7.74	
	Magnesium	mg/L	3.95	
	Sodium	mg/L	18.00	
	Iron	mg/L	0.00	
Nutrient				
	Copper	mg/L	0.04	
	Manganese	mg/L	0.02	
	Zinc	mg/L	0.02	
Organic Matter		%	1.18	
Carbon Nitrogen Ratio			50	
CEC		cmol/kg	7.8	

PlanterCell® Vermiculite





PlanterCell® Vermiculite is a lightweight, airy mineral with good water retention and insulation properties. Best used with other media, it supports seed germination, cuttings, and potting mixes.

Tech Specs	UOM	PlanterCell® Vermiculite
Material		Clay and Mica
Colour		Brown
Pack Size:	l	100
Grain Size	mm	2 to 4
Bulk Density	kg/m³	130 - 150
Fusion Point	C°	1300 - 1400
Moisture	%	7
pH Value		7.0 - 8.0





uniseal

Tel: +65 6755 0055
Fax: +65 6753 1398

Email: info@unisealsg.com
Facebook: www.facebook.com/unisealsg

Edition: 13.1.1 Jun 2026. All Rights Reserved
Last Update: June 2026

Disclaimer: All Information, specifications, data, illustrations presented in this document although correct at the time of publication are not legally binding. Some information are based on third party sources we believe reliable and we do not assure its accuracies or completeness. There may be changes subsequent to publication. Technical data may vary slightly due to source of raw material. Subject to the care and method of application, deviation in performance may occur.