

The Hills B Horizon Mix

The Hills B Horizon Mix performs well as a lower profile substrate in contained environments, below the Lightweight Planter Box Mix. It has been developed to work as the stable drainage media layer of an engineered profile. It provides enough nutrition for continued root growth while creating a stable substrate for long term volume.

The Hills B Horizon Mix is tested to the Australian Standard 4419: 2018 Soils for Landscaping and Garden Use – Organic Soil Analysis. It is also tested with the 6 Point Hydraulic Conductivity Test. We use the standards as a tool and request extra Bulk density and environmental compliant testing.

TEST RESULTS:

MAY 2021

Physical Properties	Unit	Target Range	Results	Comments
Texture	-	Loamy sand - sandy loam	Loamy Sand	Acceptable
Air-filled Porosity	%	≥ 10	12	Acceptable
Water Holding Capacity	%	≥ 40	45.3	Acceptable
Permeability (@ 16 drops)	mm/hr	> 100	584	Acceptable
Organic Matter	% w/w	< 5	22	High - Due to Ash
Wettability (AS4419)	min	≤ 5	0.61	Acceptable
Dispersibility	Category	1 or 2	3	High
Large Particles				
< 2 mm	% w/w	30 - 70	46.1	Acceptable
2 - 10 mm	% w/w	10 - 20	41	High
10 - 20 mm	% w/w	5 - 10	8.46	Acceptable
20 - 50 mm	% w/w	< 5	4.43	Acceptable
> 50 mm	% w/w	0	0	Acceptable
Saturated Density	kg/L	< 2.4	1.17	Acceptable
Chemical Properties	Unit	Target Range	Results	Comments
pH in water (1:1:5)	pH Units	5.4 - 6.8	6.83	Slightly High
Electrical Conductivity	dS/m	<2.2	1.85	Acceptable
Chloride	mg/L	≤ 200	268	High
Ammonium-N (NH4)	mg/L	≤ 100	<0.3	Acceptable
Ammonium-N + Nitrate-N (NH4 + NO3)	mg/L	≥ 50	18.4	Low
Nitrogen Draw-Down Index	-	≥ 0.7	0.11	Low
Bioassay	mg/L	≥ 70	90	Acceptable
Phosphorus	mg/L	8 - 40	6.4	Slightly Low
Low Phosphorus - P-Sensitive plant	mg/L	< 3	6.4	High
Potassium	mg/L	50 - 250	200	Acceptable
Sulphate (SO4)	mg/L	> 40	110	Acceptable
Calcium (Ca)	mg/L	≥ 80	157	Acceptable
Magnesium (Mg)	mg/L	≥ 15	46.8	Acceptable
Ca : Mg Ratio	Ratio	1.5 - 10	3.4	Acceptable
K : Mg Ratio	Ratio	1 - 7	4.3	Acceptable
Sodium (Na)	mg/L	≤ 130	113	Acceptable
Iron (Fe)	mg/L	≥ 35	30.8	Slightly Low
Copper (Cu)	mg/L	0.4 - 15	0.675	Acceptable
Zinc (Zn)	mg/L	0.3 - 10	3.9	Acceptable
Manganese (Mn)	mg/L	1 - 15	4.41	Acceptable
Boron (B)	mg/L	0.02 - 0.65	0.244	Acceptable

Saturated bulk density = 1.17kg/L. Dry bulk density = 0.59kg/L.



Laboratory recommendations are implemented when the B Horizon is the predominant growing media in the podium and where corrections need to be made. The Hills Bark Blower® staff add important nitrogen sources, plenty of calcium, micro and macro nutrients and pH adjusters if needed.

Sample Date: 30th April 2021

Report Date: 14th May 2021