

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:

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| Physical Properties | Unit | Target Range | Results | Comments |
|------------------------------------|----------|-------------------------|------------|---------------------------|
| Texture | - | Loamy sand - sandy loam | Loamy Sand | Acceptable |
| Air-filled Porosity | % | ≥ 10 | 17 | Acceptable |
| Water Holding Capacity | % | ≥ 40 | 47 | Acceptable |
| Permeability (@ 16 drops) | mm/hr | > 100 | 760 | Acceptable |
| Organic Matter | % w/w | < 5 | 16 | High - due to ash content |
| Wettability (AS4419) | min | ≤ 5 | 1.36 | Acceptable |
| Dispersibility | Category | 1 or 2 | 3 | High |
| Large Particles | | | | |
| < 2 mm | % w/w | 30 - 70 | 52.6 | Acceptable |
| 2 - 10 mm | % w/w | 10 - 20 | 30.7 | High |
| 10 - 20 mm | % w/w | 5 - 10 | 15.5 | High |
| 20 - 50 mm | % w/w | < 5 | 1.29 | 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 | 6.55 | Acceptable |
| Electrical Conductivity | dS/m | <2.2 | 2.18 | Acceptable |
| Chloride | mg/L | ≤ 200 | 390 | High |
| Ammonium-N (NH4) | mg/L | ≤ 100 | 18.5 | Acceptable |
| Ammonium-N + Nitrate-N (NH4 + NO3) | mg/L | ≥ 50 | 63 | Acceptable |
| Nitrogen Draw-Down Index | - | ≥ 0.7 | 0.04 | Low |
| Bioassay | mg/L | ≥ 70 | 100 | Acceptable |
| Phosphorus | mg/L | 8 - 40 | 9.2 | Acceptable |
| Low Phosphorus - P-Sensitive plant | mg/L | < 3 | 9.2 | High |
| Potassium | mg/L | 50 - 250 | 231 | Acceptable |
| Sulphate (SO4) | mg/L | > 40 | 130 | Acceptable |
| Calcium (Ca) | mg/L | ≥ 80 | 177 | Acceptable |
| Magnesium (Mg) | mg/L | ≥ 15 | 52.5 | Acceptable |
| Ca : Mg Ratio | Ratio | 1.5 - 10 | 2.8 | Acceptable |
| K : Mg Ratio | Ratio | 1 - 7 | 3.7 | Acceptable |
| Sodium (Na) | mg/L | ≤ 130 | 198 | High |
| Iron (Fe) | mg/L | ≥ 35 | 45 | Acceptable |
| Copper (Cu) | mg/L | 0.4 - 15 | 0.799 | Acceptable |
| Zinc (Zn) | mg/L | 0.3 - 10 | 3.3 | Acceptable |
| Manganese (Mn) | mg/L | 1 - 15 | 7.51 | Acceptable |
| Boron (B) | mg/L | 0.02 - 0.65 | 0.342 | Acceptable |

Hydraulic Conductivity – 32 drops (heavy compaction) – 948mm/hr
Saturated bulk density = 1.17kg/L. Dry bulk density = 0.53kg/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.