



Bringing soils back to life

AS3743:2003 POTTING MIXES REPORT

Sample 1 of 2 samples supplied by ReGen Soils on the 14 August 2023. Lab Job No. P4101.

Analysis requested by Declan McDonald. Your Job: LPPM Green Roof.

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| | | |
|----------------------|------------------------|--|
| Product Name: | Sample 2 Green Roof | Guideline AS3743:2003 Other Mixes |
| Product Type: | Soil | |
| Manufacturing Site: | Ecodynamics | |
| Manufactured Date: | .. | |
| Test Code: | CA-PACK-006 | |
| Standard Applicable: | AS3743:2003 | |

| Parameter | Method Reference | P4101/2 | Regular | Interpretation |
|--|--|---------|--------------------------------|--|
| Wet Bulk Density (kg/L) | AS4454:2012 Appendix J | 0.90 | .. | <p>This green roof mix was assessed against AS3743 for potting mixes. Bulk density is acceptable and saturated bulk density is low indicating lightweight condition suitable for roof gardens. Air-filled porosity and water holding capacity are acceptable. pH is slightly alkaline but is acceptable for all but acid-loving plants. EC is acceptable. Organic matter is acceptable for roof garden media. AS3743 organic carbon requirement is based on organic growing media. High organics in a roof top media are pre-disposed to slumping and volume loss over time. Nitrogen status is high. All other macro and micro elements are acceptable apart from phosphorus which is low. This level of phosphorus is ideal for P-sensitive plants but for most other plants, some P supplementation will be required.</p> |
| Dry Bulk Density (kg/L) | AS4454:2012 Appendix J | 0.65 | 0.3-0.6 | |
| Saturated Bulk Density (kg/L) | Calculation | 1.25 | | |
| Moisture Content (%) | | 28 | > 40 | |
| Air-filled Porosity (%) | | 12 | ≥ 13 | |
| Total Water Holding Capacity (%) | AS3743:2003 Appendix B | 48 | ≥ 40 | |
| Wettability (min) | AS3743:2003 Appendix C | 0m 03s | ≤ 5 | |
| pH | | 7.22 | 5.3-6.5 | |
| Electrical Conductivity (dS/m) | AS3743:2003 Appendix D | 2.37 | ≤ 2.2 | |
| Chloride (mg/L) | AS3743:2003 Appendix D | 199 | ≤ 200 | |
| Total Organic Carbon (%) | AS4454:2012 Appendix C | 4.50 | ≥ 20 | |
| Ammonium Nitrogen (mg/L N) | AS3743:2003 Appendix D | 33.2 | ≤ 100 | |
| Ammonium/Nitrate Ratio | Calculation - Ammonium/Nitrate | 0.3 | .. | |
| Nitrogen Drawdown Index (NDI ₇₅) | AS3743:2003 Appendix E | 0.63 | ≥ 0.2 | |
| Plant Growth Test - Root Elongation (mm) | AS3743:2003 Appendix F | 81 | ≥ 70 | |
| Calcium (mg/L) | | 221 | ≥ 50 | |
| Magnesium (mg/L) | | 77.2 | ≥ 15 | |
| Potassium (mg/L) | AS3743:2003 Appendix G <small>see note 6</small> | 279 | .. | |
| Sodium (mg/L) | | 187 | ≤ 130 | |
| Sulphur (mg/L) | | 194 | .. | |
| Calcium/Magnesium Ratio | Calculation - Calcium/Magnesium | 2.87 | 1.5-10 | |
| Potassium/Magnesium Ratio | Calculation - Potassium/Magnesium | 3.62 | .. | |
| Phosphorus (mg/L) | AS3743:2003 Appendix G <small>see note 6</small> | 4.97 | .. | |
| Zinc (mg/L) | | 5.38 | 0.3-10 | |
| Manganese (mg/L) <small>see note 5</small> | | 9.16 | 1-15 <small>see note 5</small> | |
| Iron (mg/L) | AS3743:2003 Appendix G <small>see note 6</small> | 55.1 | ≥ 25 | |
| Copper (mg/L) | | 0.28 | 0.4-15 | |
| Boron (mg/L) | | 0.36 | 0.02-0.65 | |