

AS4454:2012 COMPOSTS, SOIL CONDITIONERS AND MULCHES REPORT

1 sample supplied by Landtasia Organic Farms on the 5 August, 2020 - Lab Job No. J6788.

Analysis requested by Simone Dilkara.

PO Box 116 BUNGENDORE NSW 2621

		Product Name: 50019	Sample 1 50019	Guideline
		Product Type: Compost	Compost	
		Manufacturing Site: Landtasia Organic Farms	Landtasia Organic Farms	AS4454:2012
		Manufactured Date: 3/08/2020	3/08/2020	Composted
		Test Code: CA-PACK-003	CA-PACK-003	Product
		Standard Applicable: AS4454:2012	AS4454:2012	
Parameter	Method Reference	J6788/1		
Bulk Density (kg/L)	AS4454:2012 Appendix J	0.3	..	
Moisture Content (%)	AS4454:2012 Appendix I	56	> 25	
pH	AS4454:2012 Appendix B	8.33	> 5	
Electrical Conductivity (dS/m)		2.43	< 10	
Total Organic Carbon (%)		24.8	≥ 20	
Total Carbon (%)	AS4454:2012 Appendix C	30.4	..	
Total Nitrogen (%)		1.46	≥ 0.8 <i>see note 7</i>	
Carbon/Nitrogen Ratio	Calculation - Total Organic Carbon/Total Nitrogen	17.0	..	
Estimated Organic Matter (% OM)	Calculation - Total Organic Carbon x 1.7	42.2	..	
Ammonium Nitrogen (mg/L N)		131	< 200	
Ammonium Nitrogen (mg/kg N)		655	..	
Nitrate Nitrogen (mg/L N)	AS4454:2012 Appendix B	4.9	..	
Nitrate Nitrogen (mg/kg N)		24.6	≥ 10 <i>see note 7</i>	
Phosphate Phosphorus (mg/L P)		5.4	≤ 5 <i>see note 7</i>	
Phosphate Phosphorus (mg/kg P)		26.8	..	
Ammonium/Nitrate Ratio	Calculation - Ammonium/Nitrate	26.6	< 3.0	
Nitrogen Drawdown Index (NDI ₁₅₀)	AS4454:2012 Appendix O	0.8	> 0.2	
Total Calcium (%)		1.44	..	
Total Magnesium (%)		0.33	..	
Total Potassium (%)	AS4454:2012 Appendix D	0.66	..	
Total Sodium (%)		0.07	< 1 Na	
Total Sulphur (%)		0.16	..	
Total Phosphorus (%)	AS4454:2012 Appendix D	0.27	≤ 0.1 P <i>see note 10</i>	
Total Zinc (mg/kg)		145	< 300 Zn	
Total Manganese (mg/kg)		371	..	
Total Iron (mg/kg)		9,389	..	
Total Copper (mg/kg)	AS4454:2012 Appendix D	30.0	< 150 Cu	
Total Boron (mg/kg)		16.6	< 100 B	
Total Silicon (mg/kg)		1,735	..	
Total Aluminium (mg/kg)		5,348	..	
Total Molybdenum (mg/kg)		1.76	..	
Total Cobalt (mg/kg)	AS4454:2012 Appendix D	4.03	..	
Total Selenium (mg/kg)		1.12	< 5 Se	
Total Cadmium (mg/kg)		<0.5	< 1 Cd	
Total Lead (mg/kg)		20.6	< 150 Pb	
Total Arsenic (mg/kg)		4.1	< 20 As	
Total Chromium (mg/kg)	AS4454:2012 Appendix D	15.5	< 100 Cr	
Total Nickel (mg/kg)		7.0	< 60 Ni	
Total Mercury (mg/kg)		<0.1	< 1 Hg	
Total Silver (mg/kg)		<1	..	

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Parameter	Method Reference	J6788/1	Guideline
Product Name: Product Type: Manufacturing Site: Manufactured Date: Test Code: Standard Applicable:		Sample 1 50019 Compost Landtasia Organic Farms 3/08/2020 CA-PACK-003 AS4454:2012	Guideline AS4454:2012 Composted Product
Polychlorinated Biphenyls (mg/kg)		Not detected	< 0.2
Organochlorine Pesticides - DDT, DDD, DDE (mg/kg)	Sub** - SGS Laboratories SE209848	Not detected	< 0.5
Organochlorine Pesticides - Other (mg/kg) ^{see note 9}		Not detected	< 0.02
Salmonella spp (Absent in 25 g)		Not detected	Absent in 25 g
E. coli (MPN/g DW)	Sub** - Symbio Laboratories B935537	Not detected	< 100 MPN/g
Faecal Coliforms (MPN/g DW)		Not detected	< 1000 MPN/g
Particle Size Grading > 16 mm Sieve (%)		Nil	... ^{see note 5}
Particle Size Grading 5–16 mm Sieve (%)	AS4454:2012 Appendix G	10.6	... ^{see note 5}
Particle Size Grading < 5 mm Sieve (%)		89.4	... ^{see note 5}
Plastics Light Flexible or film > 5 mm (%)		<0.01	≤ 0.05
Stones and Lumps of Clay > 5 mm (%)	AS4454:2012 Appendix I	2.70	≤ 5
Glass, metal and rigid plastics > 2 mm (%)		<0.01	≤ 0.5
Wettability (min)	AS4454:2012 Appendix E	0m 20s	< 5
Total CaCO₃ Equivalent (%)	AS4454:2012 Appendix H	3.30	...
Plant Growth Test - Root Elongation (mm)	AS4454:2012 Appendix F	6	> 60
Viable Plant Propagules (7 days)	AS4454:2012 Appendix M	Nil	...
Viable Plant Propagules (21 days)	AS4454:2012 Appendix M	NA	Nil after 21 days

Notes:

- Methods from AS4454:2012 *Composts, soil conditioners and mulches*.
- Indicative guidelines are based on those in AS4454:2012 for raw mulches, pasteurized product, composted product, mature composts.
- Total Acid Extractable Nutrients indicate a store of nutrients.
- Conversions for 1 mg/kg = 1 ppm; 1% = 10,000 ppm; kg/ha = mg/kg x 2.24.
- Coarse Mulch > 70% >16mm, Fine Mulch <20% >16mm and <20% <5mm, Soil Conditioner <20% >16mm.
- The chloride calculation of Cl mg/L = EC x 640 is considered an estimate, and most likely an over-estimate.
- Guide only to be used if a product claims to contribute to plant nutrition.
- The full test observes the potential growth of viable plant propagules in a 21 day test period. In order to pass there should be Nil after 21 days
- Other Organochlorines include: Aldrin, Dieldrin, Chlordane, Heptachlor, HCB, Lindane, BHC Other Organophosphorus include: Guthion, Bromophos-ethyl, Chlorpyrifos, Chlorpyrifos-methy, Diazinon, Dichlorvos, Dimethoate, Ethion, Fenitrothion, Malathion, Parathion, Ronnel.
- Guide only to be used if a product claims to be used for phosphorus sensitive plants. < 1 if applied to sandy soils
- Analysis conducted between sample arrival date and reporting date.
- This report is not to be reproduced except in full.
- Sub** - Analysis sub-contracted.
- All testing parameters have been facilitated by a NATA accredited laboratory.
- All services undertaken by EAL are covered by the EAL Laboratory Services Terms and Conditions. These Terms and Conditions are available on the EAL website: scu.edu.au/eal, or on request.

Quality Checked: Brian Smith
 Compost & Landscape Soils Co-ordinator