

AS4454:2012 COMPOSTS, SOIL CONDITIONERS AND MULCHES REPORT

2 samples supplied by Landtasia Organic Farms on the 26 July, 2019 - Lab Job No. i4159.

Analysis requested by Simone Dilkara.

(PO Box 116 BUNDENDORE NSW 2621)

		Product Name: Product Type: Manufacturing Site: Manufactured Date: Test Code: Standard Applicable:	Sample 1 50014 Compost CA-PACK-003 AS4454:2012	Guideline <i>AS4454:2012 Composted Product</i>
Parameter	Method Reference	i4159/1		
Bulk Density (kg/L)	AS4454:2012 Appendix J	0.31		..
Moisture Content (%)	AS4454:2012 Appendix I	50		> 25
pH	AS4454:2012 Appendix B	8.35		> 5
Electrical Conductivity (dS/m)		2.56		< 10
Chloride (mg/kg)	**Rayment & Lyons 2011 - 5A3a	3,352		..
Total Organic Carbon (%)		21.7		≥ 20
Total Carbon (%)	AS4454:2012 Appendix C	25.6		..
Total Nitrogen (%)		1.39		≥ 0.8 <i>see note 7</i>
Carbon/Nitrogen Ratio	Calculation - Total Organic Carbon/Total Nitrogen	15.7		..
Estimated Organic Matter (% OM)	Calculation - Total Organic Carbon x 1.7	37.0		..
Ammonium Nitrogen (mg/L N)		9.5		< 200
Ammonium Nitrogen (mg/kg N)		47		..
Nitrate Nitrogen (mg/L N)	AS4454:2012 Appendix B	12.0		..
Nitrate Nitrogen (mg/kg N)		60.0		≥ 10 <i>see note 7</i>
Phosphate Phosphorus (mg/L P)		9.5		≤ 5 <i>see note 7</i>
Phosphate Phosphorus (mg/kg P)		47		..
Ammonium/Nitrate Ratio	Calculation - Ammonium/Nitrate	0.8		< 3.0
Nitrogen Drawdown Index (NDI ₁₅₀)	AS4454:2012 Appendix O	0.2		> 0.2
Total Calcium (%)		2.03		..
Total Magnesium (%)		0.45		..
Total Potassium (%)	AS4454:2012 Appendix D	1.02		..
Total Sodium (%)		0.15		< 1 Na
Total Sulphur (%)		0.16		..
Total Phosphorus (%)	AS4454:2012 Appendix D	0.52		≤ 0.1 P <i>see note 10</i>
Total Zinc (mg/kg)		186		< 300 Zn
Total Manganese (mg/kg)		505		..
Total Iron (mg/kg)		10,481		..
Total Copper (mg/kg)	AS4454:2012 Appendix D	44		< 150 Cu
Total Boron (mg/kg)		23		< 100 B
Total Silicon (mg/kg)		1,554		..
Total Aluminium (mg/kg)		5,990		..
Total Molybdenum (mg/kg)		4.03		..
Total Cobalt (mg/kg)	AS4454:2012 Appendix D	4.74		..
Total Selenium (mg/kg)		1.25		< 5 Se
Total Cadmium (mg/kg)		<0.5		< 1 Cd
Total Lead (mg/kg)		15.9		< 150 Pb
Total Arsenic (mg/kg)		5.2		< 20 As
Total Chromium (mg/kg)	AS4454:2012 Appendix D	18.7		< 100 Cr
Total Nickel (mg/kg)		9.4		< 60 Ni
Total Mercury (mg/kg)		<0.1		< 1 Hg
Total Silver (mg/kg)		<1		..

AS4454:2012 COMPOSTS, SOIL CONDITIONERS AND MULCHES REPORT

2 samples supplied by Landtasia Organic Farms on the 26 July, 2019 - Lab Job No. i4159.

Analysis requested by Simone Dilkara.

(PO Box 116 BUNDENDORE NSW 2621)

Parameter	Method Reference	Sample 1 50014 Compost CA-PACK-003 AS4454:2012	Guideline AS4454:2012 Composted Product
	Product Name: Product Type: Manufacturing Site: Manufactured Date: Test Code: Standard Applicable:		
		i4159/1	
Polychlorinated Biphenyls (mg/kg)		<0.2	< 0.2
Organochlorine Pesticides - DDT, DDD, DDE (mg/kg)	AS4454:2012 Appendix 3.1 (C)	<0.01	< 0.5
Organochlorine Pesticides - Other (mg/kg) ^{see note 9}		<0.01	< 0.02
Salmonella spp (Absent in 25 g)		Not Detected	Absent in 25 g
E. coli (MPN/g DW)	AS4454:2012 Appendix D	Not Detected	< 100 MPN/g
Faecal Coliforms (MPN/g DW)		216	< 1000 MPN/g
Particle Size Grading > 16 mm Sieve (%)		Nil	.. see note 5
Particle Size Grading 5–16 mm Sieve (%)	AS4454:2012 Appendix G	12.9	.. see note 5
Particle Size Grading < 5 mm Sieve (%)		87.1	.. 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	5.40	≤ 5
Glass, metal and rigid plastics > 2 mm (%)		<0.01	≤ 0.5
Wettability (min)	AS4454:2012 Appendix E	4m 20s	< 5
Calcium Carbonate (ANC) (%)	AS4454:2012 Appendix H	3.51	..
Plant Growth Test - Root Elongation (mm)	AS4454:2012 Appendix F	60	> 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-methyl, 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.
- Analysis sub-contracted - SGS Laboratories report no. SE195888, Symbio Laboratories report no. B810526.
- 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