

AS4454:2012 COMPOSTS, SOIL CONDITIONERS AND MULCHES REPORT

1 sample supplied by Landtasia Organic Farms on the 5 August 2024. Lab Job No. R7260.

Analysis requested by David Tabner. **Your Job: PO 6-1210 50036 Windrow 6.**

PO Box 116 BUNGENDORE NSW 2621

		Product Name: Product Type: Manufacturing Site: Manufactured Date: Test Code: Standard Applicable:	Sample 1 50036 Windrow 6 Compost LOF 31/07/2024 CA-PACK-003 AS4454:2012	Guideline AS4454:2012 Composted Product
Parameter	Method Reference		R7260/1	
Wet Bulk Density (kg/L)	AS4454:2012 Appendix J		0.68	..
Dry Bulk Density (kg/L)	AS4454:2012 Appendix J		0.32	..
Moisture Content (%)	AS4454:2012 Appendix I		53	> 25
pH			7.63	> 5
Electrical Conductivity (dS/m)	AS4454:2012 Appendix B		1.56	< 10
Total Organic Carbon (%)			26.8	≥ 20
Total Carbon (%)	AS4454:2012 Appendix C		27.2	..
Total Nitrogen (%)			1.47	≥ 0.8 <i>see note 7</i>
Carbon/Nitrogen Ratio	Calculation - Total Organic Carbon/Total Nitrogen		18.2	..
Estimated Organic Matter (% OM)	Calculation - Total Organic Carbon x 1.7		45.6	..
Ammonium Nitrogen (mg/L N)			1.8	< 200
Ammonium Nitrogen (mg/kg N)			9.2	..
Nitrate Nitrogen (mg/L N)			3.2	..
Nitrate Nitrogen (mg/kg N)	AS4454:2012 Appendix B Dissolved Nutrients		16.0	≥ 10 <i>see note 7</i>
Phosphate Phosphorus (mg/L P)			15.4	≤ 5 <i>see note 7</i>
Phosphate Phosphorus (mg/kg P)			77.0	..
Ammonium/Nitrate Ratio	Calculation - Ammonium/Nitrate		0.6	< 3.0
Nitrogen Drawdown Index (NDI ₁₅₀)	AS4454:2012 Appendix O		>1.0	> 0.2
Total Calcium (%)			1.85	..
Total Magnesium (%)			0.41	..
Total Potassium (%)	AS4454:2012 Appendix D Total Salts		0.83	..
Total Sodium (%)			0.06	<1 Na
Total Sulphur (%)			0.15	..
Total Phosphorus (%)	AS4454:2012 Appendix D		0.32	≤ 0.1 <i>see note 10</i>
Total Zinc (mg/kg)			147.03	< 300 Zn
Total Manganese (mg/kg)			393.83	..
Total Iron (mg/kg)			9,903.48	..
Total Copper (mg/kg)	AS4454:2012 Appendix D Total Metals		28.05	< 150 Cu
Total Boron (mg/kg)			20.20	< 100 B
Total Silicon (mg/kg)			1,269.96	..
Total Aluminium (mg/kg)			5,940.63	..
Total Molybdenum (mg/kg)			1.67	..
Total Cobalt (mg/kg)	AS4454:2012 Appendix D Total Metals		4.30	..
Total Selenium (mg/kg)			<1	< 5 Se
Total Cadmium (mg/kg)			<0.5	< 1 Cd
Total Lead (mg/kg)			16.3	< 150 Pb
Total Arsenic (mg/kg)			3.8	< 20 As
Total Chromium (mg/kg)	AS4454:2012 Appendix D Total Heavy Metals		19.9	< 100 Cr
Total Nickel (mg/kg)			8.3	< 60 Ni
Total Mercury (mg/kg)			<0.1	< 1 Hg
Total Silver (mg/kg)			<1	..

Product Name: 50036 Windrow 6 Product Type: Compost Manufacturing Site: LOF Manufactured Date: 31/07/2024 Test Code: CA-PACK-003 Standard Applicable: AS4454:2012		Sample 1	Guideline
Parameter	Method Reference	R7260/1	
Polychlorinated Biphenyls (mg/kg)		<0.1 ND	< 0.2
Organochlorine Pesticides - DDT, DDD, DDE (mg/kg)	Sub** - Symbio Laboratories B1598380 Pesticides and PCBs	<0.02 ND	< 0.5
Organochlorine Pesticides - Other (mg/kg) ^{see note 9}		<0.02 ND	< 0.02
Salmonella spp (Absent in 25 g)	Sub** - Symbio Laboratories B1594550 (M16.1 AS 5013.10)	ND	Absent in 25 g
E. coli (MPN/g DW)	Sub** - Symbio Laboratories B1594550 (M8.3 - AS 5013.3 & AS 5013.15)	<3.0 ND	< 100 MPN/g
Faecal Coliforms (MPN/g DW)		<3.0 ND	< 1000 MPN/g
Bacillus cereus (CFU/g)	Sub** - Symbio Laboratories S1595383 (M5.1 - AS 5013.2)	<10 ND	..
Clostridium perfringens (CFU/g)	Sub** - Symbio Laboratories S1595383 (M7.1 - AS 5013.16)	<10 ND	..
Particle Size Grading > 16 mm Sieve (% DW)		Nil	.. see note 5
Particle Size Grading 5–16 mm Sieve (% DW)	AS4454:2012 Appendix G Particle Size Grading	8.6	.. see note 5
Particle Size Grading < 5 mm Sieve (% DW)		91.4	.. see note 5
Plastics Light Flexible or film > 5 mm (% DW)		<0.01	≤ 0.05
Stones and Lumps of Clay > 5 mm (% DW)	AS4454:2012 Appendix I Visible Contaminants	2.02	≤ 5
Glass, metal and rigid plastics > 2 mm (% DW)		<0.01	≤ 0.5
Wettability (min)	AS4454:2012 Appendix E	3m 49s	< 5
Plant Growth Test - Root Elongation (mm)	AS4454:2012 Appendix F	101	> 60
Viable Plant Propagules (7 days)	AS4454:2012 Appendix M	Nil	..
Viable Plant Propagules (21 days)	AS4454:2012 Appendix M	NR	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.
- < LOR Less than limit of reporting. ND Not detected. NA Not applicable. NR Not required.
- All testing has been done so in accordance with AS4454:2012 as a Composted Product.
- Testing completed in a NATA accredited laboratory.
- Analysis conducted between sample arrival date and reporting date.
- This report is not to be reproduced except in full. Results only relate to the item tested.
- All services undertaken by EAL are covered by the EAL Laboratory Services Terms and Conditions (refer SCU.edu.au/eal/t&cs or on request).
- This report was issued on 29/08/2024.

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