

AS4454:2012 COMPOSTS, SOIL CONDITIONERS AND MULCHES REPORT

(Number of samples) sample supplied by (Company name) on the (Date submitted), 20xx - Lab Job No. xx.

Analysis requested by (Name of Client).

(Client Address)

Product Name: Product Type: Manufacturing Site: Manufactured Date: Test Code: Standard Applicable:		Sample 1	Guideline	Guideline	Guideline	Guideline
		CA-PACK-003 AS4454:2012	AS4454:2012 Raw Mulch	AS4454:2012 Pasteurized Product	AS4454:2012 Composted Product	AS4454:2012 Mature Compost
Parameter	Method Reference	X/1				
Moisture Content (%)	AS4454:2012 Appendix I		..	> 25	> 25	> 25
pH	AS4454:2012 Appendix B		> 5	> 5	> 5	> 5
Electrical Conductivity (dS/m)			< 10	< 10	< 10	< 10
Total Organic Carbon (%)			≥ 20	≥ 20	≥ 20	≥ 20
Total Nitrogen (%)	AS4454:2012 Appendix C		≥ 0.8 <i>see note 7</i>	≥ 0.8 <i>see note 7</i>	≥ 0.8 <i>see note 7</i>	≥ 0.8 <i>see note 7</i>
Carbon/Nitrogen Ratio	Calculation - Total Organic Carbon/Total Nitrogen		..	..	..	..
Estimated Organic Matter (% OM)	Calculation - Total Carbon x 1.7		..	..	..	..
Ammonium Nitrogen (mg/L N)			..	..	< 200	< 100
Ammonium Nitrogen (mg/kg N)			..	..	..	..
Nitrate Nitrogen (mg/L N)			..	..	..	..
Nitrate Nitrogen (mg/kg N)	AS4454:2012 Appendix B		..	..	≥ 10 <i>see note 7</i>	≥ 10 <i>see note 7</i>
Phosphate Phosphorus (mg/L P)			..	≤ 5	≤ 5 <i>see note 7</i>	≤ 5 <i>see note 7</i>
Phosphate Phosphorus (mg/kg P)			..	..	..	..
Ammonium/Nitrate Ratio	Calculation - Ammonium/Nitrate		..	..	< 3.0	< 0.5
Nitrogen Drawdown Index (NDI ₅₀)	AS4454:2012 Appendix O		..	..	> 0.2	> 0.5
Total Calcium (%)			..	..	..	..
Total Magnesium (%)			..	..	..	..
Total Potassium (%)	AS4454:2012 Appendix D		..	..	..	..
Total Sodium (%)			<1 Na	<1 Na	<1 Na	<1 Na
Total Sulphur (%)			..	..	..	..
Total Phosphorus (%)	AS4454:2012 Appendix D		≤ 0.1 P <i>see note 10</i>	≤ 0.1 P <i>see note 10</i>	≤ 0.1 P <i>see note 10</i>	≤ 0.1 P <i>see note 10</i>
Total Zinc (mg/kg)			< 300 Zn	< 300 Zn	< 300 Zn	< 300 Zn
Total Manganese (mg/kg)			..	..	..	..
Total Iron (mg/kg)			..	..	..	..
Total Copper (mg/kg)	AS4454:2012 Appendix D		< 150 Cu	< 150 Cu	< 150 Cu	< 150 Cu
Total Boron (mg/kg)			< 100 B	< 100 B	< 100 B	< 100 B
Total Silicon (mg/kg)			..	..	..	..
Total Aluminium (mg/kg)			..	..	..	..
Total Molybdenum (mg/kg)			..	..	..	..
Total Cobalt (mg/kg)	AS4454:2012 Appendix D		..	..	..	..
Total Selenium (mg/kg)			< 5 Se	< 5 Se	< 5 Se	< 5 Se
Total Cadmium (mg/kg)			< 1 Cd	< 1 Cd	< 1 Cd	< 1 Cd
Total Lead (mg/kg)			< 150 Pb	< 150 Pb	< 150 Pb	< 150 Pb
Total Arsenic (mg/kg)			< 20 As	< 20 As	< 20 As	< 20 As
Total Chromium (mg/kg)	AS4454:2012 Appendix D		< 100 Cr	< 100 Cr	< 100 Cr	< 100 Cr
Total Nickel (mg/kg)			< 60 Ni	< 60 Ni	< 60 Ni	< 60 Ni
Total Mercury (mg/kg)			< 1 Hg	< 1 Hg	< 1 Hg	< 1 Hg
Total Silver (mg/kg)			..	..	..	..
Polychlorinated Biphenyls (mg/kg)			< 0.2	< 0.2	< 0.2	< 0.2
Organochlorine Pesticides - DDT, DDD, DDE (mg/kg)	AS4454:2012 Appendix 3.1 (C)		< 0.5	< 0.5	< 0.5	< 0.5
Organochlorine Pesticides - Other (mg/kg) <i>see note 9</i>			< 0.02	< 0.02	< 0.02	< 0.02
Salmonella spp (Absent in 25 g)			Absent in 25 g	Absent in 25 g	Absent in 25 g	Absent in 25 g
E. coli (MPN/g DW)	AS4454:2012 Appendix 3.1 (C)		< 100 MPN/g	< 100 MPN/g	< 100 MPN/g	< 100 MPN/g
Faecal Coliforms (MPN/g DW)			< 1000 MPN/g	< 1000 MPN/g	< 1000 MPN/g	< 1000 MPN/g
Particle Size Grading > 16 mm Sieve			.. <i>see note 10</i>	.. <i>see note 10</i>	.. <i>see note 10</i>	.. <i>see note 10</i>
Particle Size Grading 5-16 mm Sieve	AS4454:2012 Appendix G		.. <i>see note 10</i>	.. <i>see note 10</i>	.. <i>see note 10</i>	.. <i>see note 10</i>
Particle Size Grading < 5 mm Sieve			.. <i>see note 10</i>	.. <i>see note 10</i>	.. <i>see note 10</i>	.. <i>see note 10</i>

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		CA-PACK-003 AS4454:2012	AS4454:2012 Raw Mulch	AS4454:2012 Pasteurized Product	AS4454:2012 Composted Product	AS4454:2012 Mature Compost
Parameter	Method Reference	X/1				
Plastics Light Flexible or film > 5 mm			≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05
Stones and Lumps of Clay > 5 mm	AS4454:2012 Appendix I		≤ 5	≤ 5	≤ 5	≤ 5
Glass, metal and rigid plastics > 2 mm			≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5
Wettability (min)	AS4454:2012 Appendix E		..	..	< 5	<5
Plant Growth Test - Root Elongation (mm)	AS4454:2012 Appendix F		..	..	> 60	> 60
Oxygen Consumption Rate (mgO ₂ /Kg/min)			..	..
Specific Oxygen Uptake Rate (mgO ₂ /gVVS/hr)			..	..	< 3	≤ 1
Viable Plant Propagules (days)	AS4454:2012 Appendix M		Nil after 21 days	Nil after 21 days	Nil after 21 days	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 - XXX Laboratories report no. xx.
- All testing parameters have been facilitated by a NATA accredited laboratory.

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