

# LABORATORY TEST REPORT

## AUSTRALIAN STANDARD AS 4454-2012 STANDARD MARK COMPOST

**Client ID:** Bunbury Harvey Regional Council

**Product ID:** Compost (non-standard)

**Lab No:** SS1197

**Batch No:** MOP TEST 9

**Date received:** 24/04/20

**Product Description:** Composted organic material suitable for adding to soils.

Characteristic & Unit	Requirement From AS 4454-2012	Results
Description	Conforms	
pH	5.0 to 8.0	7.7
Electrical Conductivity dS/m	10 (Refer to Table 3.3)	4.87
Phosphorus, soluble mg/L	≤ 5 for P sensitive plants	0.93
Phosphorus, total %	≤0.1 for P sensitive plants	0.34
Ammonium-N mg/L	<200	21.0
Nitrate-N mg/L	≥10	72.0
Ammonium-N plus nitrate-N mg/L	Level appropriate for application	93.0
Nitrogen, total %	≥0.8	1.44
Total Organic Carbon %	≥20	15.3
Organic matter content %	≥20	26.3
Carbon:Nitrogen Ratio (C:N) %	Level appropriate for application	10.6
Potassium K %	Level appropriate for application	0.66
Calcium Ca %	Level appropriate for application	3.42
Magnesium Mg %	Level appropriate for application	0.37
Sulphur S %	Level appropriate for application	0.49
Iron Fe mg/kg	Level appropriate for application	7068.7
Manganese Mn mg/kg	Level appropriate for application	115.5
Sodium Na %	< 1	0.28
Wettability Minutes	< 5	3 mins
Plant growth test (Bioassay) mm	≥ 60	60
Particle size grading: %		
Maximum size mm	≤16	Compost
Tolerance % mass	≤ 20 % retained by sieve	
Total CaCO <sub>3</sub> equivalent %	To be determined and stated if pH > 8.0	-
Chemical Contaminants (Inc. Heavy Metals)	State guidelines for unrestricted use	Passed
Organic Contaminants	State guidelines for unrestricted use	Passed
Pathogens (Plant & Human Pathogens)	State guidelines for unrestricted use	Passed
Moisture Content %	Minimum 25	40%
Contaminants %		
Glass, metal and rigid plastics >2mm	≤ 0.5	0.06
Plastics- light, flexible or film >5 mm	≤ 0.05	0.03
Stones and lumps of clay ≥ 5 mm	≤ 5	2.27

**Note:** Detailed test results continued on next page

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Characteristic & Unit	Requirement From AS 4454-2012	Results
Constituents	Maximum allowable concentration in mg/kg dry solids	mg/kg
<b>Chemical Contaminants:</b>		
<b>Grade C1 Biosolids</b>		
Arsenic mg/kg	20	<5
Cadmium mg/kg	1	0.36
Chromium mg/kg	100	13
Copper mg/kg	100	41
Mercury mg/kg	1	<0.02
Nickel mg/kg	60	5
Lead mg/kg	150	16
Zinc mg/kg	200	156
Molybdenum mg/kg	4	4
Selenium mg/kg	5	<2
Boron B mg/kg	100	23
<b>Organic Contaminants:</b>		
<b>Grade C1 Biosolids</b>		
<b>OCOP and PCB</b>		
Aldrin mg/kg	0.02	<0.01
BHC Total mg/kg	0.5	<0.01
Bifenthrin mg/kg	0.2	0.2
Bromophos Ethyl mg/kg	0.05	<0.05
Chlordane mg/kg	0.02	<0.01
Chlorpyrifos mg/kg	0.02	<0.02
Dieldrin mg/kg	0.02	<0.01
DDT/DDD/DDE Analogs mg/kg	0.5	<0.01
Heptachlor mg/kg	0.02	<0.01
HCB (Hexachlorobenzene) mg/kg	0.02	<0.01
Lindane mg/kg	0.02	<0.01
Diazinon mg/kg	0.2	<0.2
Ethion mg/kg	0.05	<0.05
Fenitrothion mg/kg	0.05	<0.1
Malathion mg/kg	0.1	<0.1
PCB Total mg/kg (as Aroclor Ind)	0.2	<0.2
<b>Pathogen Test:</b>		
<b>Grade P1 Biosolids</b>		
Phytophthora (fungal plant pathogen)	Not detected	Not detected
Pythium (fungal plant pathogen)	Not detected	Not detected
Salmonella sp.	< 1 Salmonella per 50 g	Not detected
Thermotolerant coliforms (E-coli)	<100 cfu/g	<100
<b>Maturity Index:</b>		
Solviita – Maturity Index	≥ 5 or 6	6
Nitrogen Drawdown Index (NDI)	>0.2	0.52

**Comments:** Test results apply to the sample submitted for analysis and does not necessarily imply that the product meets all the requirements of this Standard.

Reported by: **Maria Sevo**  
Laboratory Manager



Date: 20/05/20