



Average Compost Analysis

Parameter	Method	Units (DW = Dry Weight)	Raw Compost		Cured Compost	
			Average Analysis	Desirable Values	Average Analysis	Desirable Values
1. General Parameter						
(1) Specific Weight	graphimetric	kg/liter	0.68		0.82	
(2) pH - Value	1: 2 extraction in H ₂ O		8.5	< 8.2	7.7	< 7.5
(3) Conductivity (Salt)	1: 2 extraction in H ₂ O	mS/cm	6.5 ¹⁾	< 4.0	5.3 ¹⁾	< 2.5
(4) Dry Weight (DW)	graphimetric at 105°C	%	57.0	> 50	59.0	> 55
(5) Organic Matter	graphimetric at 500°C	% in DW	28.0	< 50	27.0	< 40
(6) Organic Carbon	(5) / 2.2	% in DW	12.7		12.3	
(7) C / N - Ratio	(5) / [(8) x 0.1725]		11.1		10.7	
2. Nutrients						
(8) Total Nitrogen	Kjeldahl	kg/ton DW	14.6	> 10.0	14.6	> 12.0
(9) Ammonium-N	photometric	kg/ton DW	0.03	< 0.5	0.015	< 0.5
(10) Nitrate-N	photometric	kg/ton DW	0.30	> 0.07	1.80	> 0.08
(11) Nitrate-N / Ammonium-N Ratio	(10) / (9)	kg/ton DW	10.0	> 2.0	120.0	> 20.0
(12) Nitrite Nitrogen	photometric	kg/ton DW	-	< 0.008	-	< 0.004
(13) Phosphor as P	photometric	kg/ton DW	3.7		3.7	
(14) Phosphor as P ₂ O ₅	(13) x 2.29	kg/ton DW	8.5		8.5	
(15) Potassium as K	FAAS	kg/ton DW	19.3		19.3	
(16) Potassium as K ₂ O	(15) x 1.20	kg/ton DW	23.1		23.1	
(17) Magnesium as Mg	FAAS	kg/ton DW	6.7		6.7	

¹⁾ Varies strongly, upper limit 10 mS/cm

Notes:

1. FAAS = Flameless Atomic Absorption Spectroscopy.
2. As Indonesian laboratories have proven to be unreliable, Total Nitrogen (N), Phosphorus (P) and Potassium (K) are periodically analyzed by a Swiss laboratory that is specifically accredited for compost analyses.
3. The Nitrate/Ammonium Ratio is the primary indicator for the curing process, the higher the more cured.



- The salt content of Indonesian compost is relatively high, due to the proximity of the sea. Most of the salt is KCl.
- For seeds, seedlings and sensitive plants applications refer to Technical Note No. 12 for suggestion how to reduce the salt content.
- 1 mS/cm conductivity equals 0.064 % salt (regardless whether it is NaCl, KCl or CaCl₂)