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_2O		**8.5**	*< 8.2*	**7.7**	*< 7.5*
(3) Conductivity	1 : 2 extraction in H_2O	mS/cm	**6.5** [1)]	*< 4.0*	**5.3** [1)]	*< 2.5*
Salt	(1 mS/cm=0.2 % KCl)	%	**1.3**		**1.1**	
(4) Dry Weight (DW)	graphimetric at 105ºC	%	**57.0**	*> 50*	**59.0**	*> 55*
(5) Organic Matter	graphimetric at 500ºC	% 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_2O_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_2O	(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 (Potassium chloride).
- For seeds, seedlings and sensitive plants applications refer to Technical Note No. 12 for suggestion how to reduce the salt content.