

## MAINEGRO QUALITY DATA

(Biosolids Compost Analysis Data)

Nutrient Value:	MaineGro Compost	Typical Cow Manure	Typical Chicken Manure
Nitrogen (% as N)	1.7 (1.2-2.7)	1.5 to 2.5	4.0 to 7.5
Phosphorus (% as P <sub>2</sub> O <sub>5</sub> )	2.3 (2.1-2.7)	0.7 to 1.5	7.0 to 13
Potassium (%as K <sub>2</sub> O)	0.34 (0.25-0.49)	1.3 to 2.0	2.8 to 5.5

All values on a dry wt basis, assumes manures at 30% solids.

MaineGro Compost can be compared to other agricultural products for macro nutrients as a 1.72.3-0.3 N-P-K product. Because it is an organic product, MaineGro also contains significant quantities of beneficial micro nutrients such as Boron, Manganese, Copper, Iron, Sulfur and Zinc that chemical fertilizers may not. Also, the nitrogen release rate of MaineGro is dependent primarily upon the needs of the plants being grown, and the humus in the compost builds the cation exchange capacity (CEC) value of the soil thus “nutrient wash off” or leaching of nutrients is less of a concern than with commercial chemical fertilizers.

### Liming Value:

pH range 6.8 to 7.4

Total Calcium.....9,630 mg/kg

equals 2.41% as CaCO<sub>3</sub> (dry wt)

Total Magnesium.....2,125 mg/kg

equals 0.74 as CaCO<sub>3</sub> (dry wt)

### Salt Concentration:

Sodium.....1184mg/kg Chloride.....1663 mg/kg

**Specific Conductance:** 1.7 mmhos average (See discussion of compost uses on previous page for discussion of salt content and compost suitability).

### Metals Concentrations (EPA and DEP regulated metals):

Metal	Regulatory Limit EPA/DEP	MaineGro Compost	LAWPCA Biosolids	Average Soil	Cow Manure	Poultry Manure
Arsenic	41/10	4.3	10.5	7.0	no data	29
Cadmium	39/10	0.9 <sup>(1)</sup>	2.3 <sup>(1)</sup>	0.4-1.2	1.0	1.9
Chromium	None/1000	20.1	52.2	30	53	135
Copper	1500/1000	176	390	23	42	85
Lead	300/300	23.9	59.5	17-27	14	26
Mercury	17/6	0.00031 <sup>(1)</sup>	0.00057 <sup>(1)</sup>	0.007	no data	no data
Molybdenum	75/75	5.5	14.3	0.32	no data	no data
Nickel	420/200	11.3 <sup>(1)</sup>	26.2	18-23	200	20
Selenium	None/100	1.9 <sup>(1)</sup>	4.8 <sup>(1)</sup>	0.3	no data	no data
Zinc	2800/2000	279	537	40-67	180	425

Notes: All values shown are mg/kg dry weight (equivalent to parts per million). EPA limit is for “exceptional quality biosolids” suitable for unrestricted use. DEP limit is the screening standard which is more stringent than the actual limit. All LAWPCA values are averages of seven compost samples or thirteen biosolids samples taken in 2010. <sup>(1)</sup>Number shown likely overestimates metal concentration as some values shown as less than were averaged at the numerical value.