

Physical Characteristics and Maturity Index of 5 Compost Samples

	Woodchip Plenum	Vertical Pipes	Static Aerated	Control Pile 1	Control Pile 2
Weight of 5 gallons	12.83 lbs	12.79 lbs	9.43 lbs	12.60 lbs	20.60 lbs
Not passing thru the screen	11.43 lbs	10.00 lbs	8.44 lbs	10.25 lbs	13.16 lbs
Passing thru 1/4" screen "fines"	1.26 lbs	2.66 lbs	1.15 lbs	2.25 lbs	7.17 lbs
Percent fines	9.8%	20.7%	12.1%	17.8%	34.8%
Bulk Density (Pounds/cu/yd)	509.4 lbs/cu yd	507.8 lbs/cu yd	374.4 lbs/cu yd	500.2 lbs/cu yd	817.8 lbs/cu yd
Solvita Maturity Index	6	6	7	7	7

(For comparison a sample of 2 year old compost from a stockpile is 945.3 lbs/cu yd and 76.7% fines)

Solvita tests were performed on each of the 5 samples that the physical tests were run on. A measured of volume of sifted compost is added to a jar with 2 test squares and sealed with an airtight top. One square will measure CO₂, or respiration as the amount of oxygen consumed. The other square measures the NH₃ or the amount of ammonia still being given off by the organic material in the sample. After a specific amount of time the color change on the test squares is compared to a chart to determine a number value of CO₂ and NH₃. From another chart provided with the test kit, a combination of the two scores provides a Maturity Index number, or how well cured (or the completeness of decomposition) of the sample on a scale of 1 to 8. From the test handbook, "A Solvita maturity index of 6 and above is commonly recognized as suitable maturity for official uses"