

Component	Percent by mass	Typical density, kg/m ³	Volume,* m ³
Food waste	15	290	0.52
Paper	45	85	5.29
Cardboard	10	50	2.00
Plastics	10	65	1.54
Garden trimmings	10	105	0.95
Wood	5	240	0.21
Tin cans	5	90	0.56
			11.07

* Based on a 1000-kg sample of waste.

2. Compute the density of a waste sample using the data from step 1.

$$\text{Density} = \frac{1000 \text{ kg}}{11.07 \text{ m}^3} = 90.33 \text{ kg/m}^3$$

Table 10-5 Typical densities for solid wastes components and mixtures

Item	Density, kg/m ³	
	Range	Typical
Component*		
Food wastes	120-480	290
Paper	30-130	85
Cardboard	30-80	50
Plastics	30-130	65
Textiles	30-100	65
Rubber	90-200	130
Leather	90-260	160
Garden trimmings	60-225	105
Wood	120-320	240
Misc. organics	90-360	140
Glass	160-480	195
Tin cans	45-160	90
Nonferrous metals	60-240	160
Ferrous metals	120-1200	320
Dirt, ashes, brick, etc	320-960	480
Municipal solid wastes		
Uncompacted	90-180	130
Compacted	180-450	300
(in compactor truck)		
In landfill	350-550	475
(compacted normally)		
In landfill	600-750	600
(well-compacted)		

* Data for components is on an as-discarded basis.